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Vol. 132, No. 19 May 12, 1952

RAILWAY AGE

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Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price, $3.00 a year to railroad employees only in U. S., U. S. possessions, Canada and Mexico, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, $10.00 a year; in other countries, $15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues $1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

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Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Branch Offices: 1081 National Press Building, Washington 4, D. C.—Terminal Tower, Cleveland 13, Ohio.—Terminal Sales Building, Portland 5, Ore.—1127 Wilshire Boulevard, Los Angeles 17, Cal.—244 California Street, San Francisco 4, Cal.—2909 Maple Avenue, Dallas 4, Tex.

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia American Builder
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Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.

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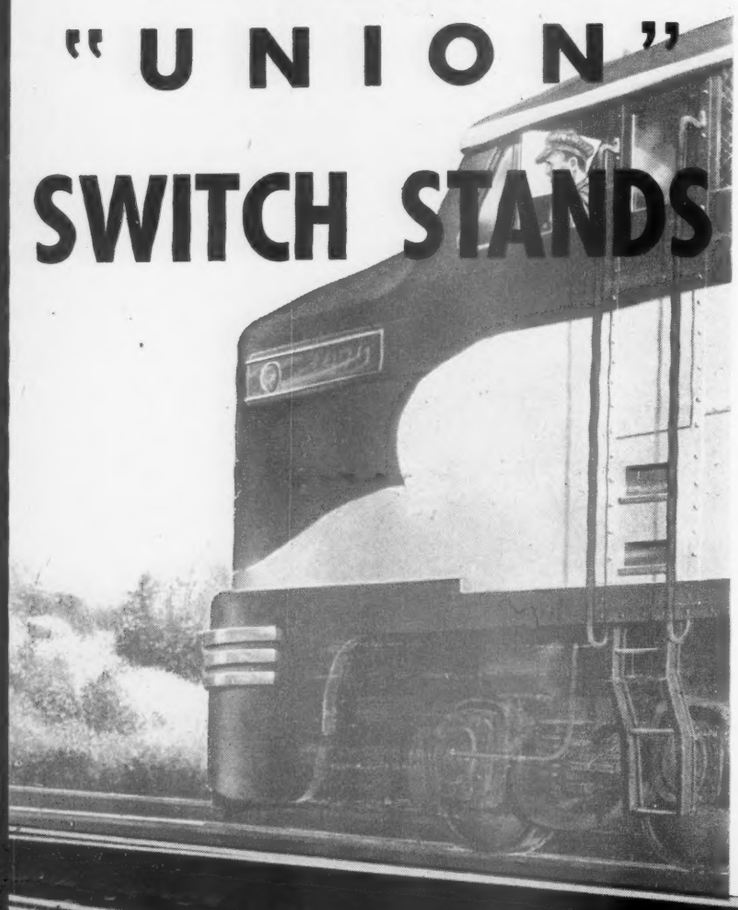

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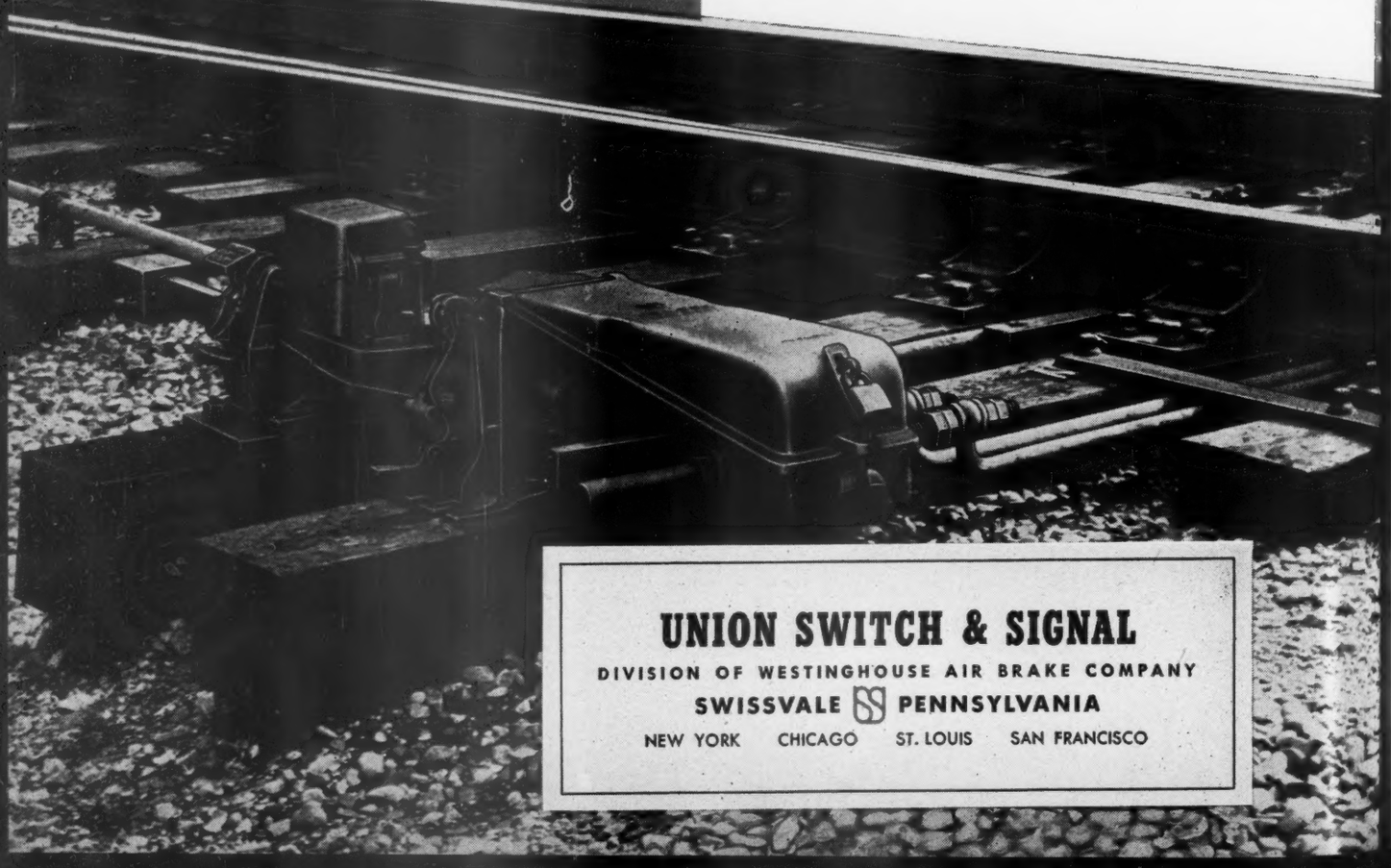

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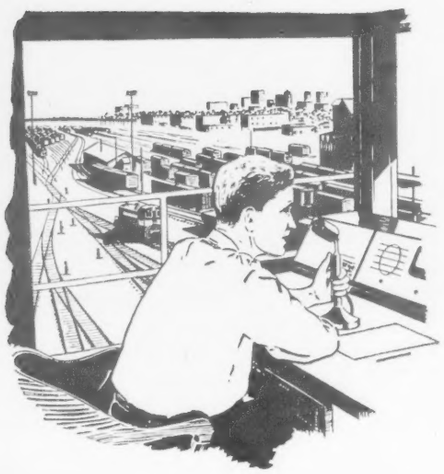
WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, two months	
1952	$1,712,000,596
1951	1,564,685,412
Operating expenses, two months	
1952	$1,335,056,113
1951	1,253,704,210
Taxes, two months	
1952	$ 206,697,408
1951	181,224,306
Net railway operating income, two months	
1952	$ 141,962,386
1951	98,153,367
Net income, estimated, two months	
1952	$ 91,000,000
1951	53,000,000
Average price railroad stocks	
May 6, 1952	59.59
May 8, 1951	57.44
Car loadings, revenue freight	
17 weeks, 1952	12,250,368
17 weeks, 1951	12,646,154
Average daily freight car surplus	
Week ended May 3, 1952	18,080
Week ended May 5, 1951	8,941
Average daily freight car shortage	
Week ended May 3, 1952	2,219
Week ended May 5, 1951	9,738
Freight cars delivered	
March 1952	8,159
March 1951	7,011
Freight cars on order	
April 1, 1952	115,854
April 1, 1951	158,619
Freight cars held for repairs	
April 1, 1951	88,246
April 1, 1952	94,509
Net ton-miles per serviceable car per day	
February 1952	1,027
February 1951	964
Average number railroad employees	
Mid-March 1952	1,220,658
Mid-March 1951	1,274,156



In This Issue . . .

THE WESTERN MARYLAND'S centennial is the occasion for a comprehensive review this week, beginning on page 53, of that relatively small but relatively busy railroad's progress from a local farmer's facility of a century ago to an outstanding freight carrier which turns in highly favorable performance records in a territory of decidedly more than average difficulty.

TRAFFIC ORPHAN—that's the way less-carload freight is characterized in an article in this issue by Harry H. Potts (page 65). He sets forth a four-point plan for improving the handling of l.c.l., employing a coupon-type waybill. This plan, he contends, would, if effected by the railroads, result in expedited service for customers, a substantial reduction in costs of interline cartage and trap car movement, freighthouse and transfer operations, loss and damage claims, and accounting and handling operations.

"BENCH MARKS AND YARDSTICKS" department has been appearing in *Railway Age* now for 10 successive weeks. Correspondence from readers conclusively shows that standards of performance, for an individual or a department, vary widely from road to road. Where there is so much variation there must be room, in some cases, for improvement, or at least for a reappraisal of the circumstances that are responsible for the variation. Constructive thoughts about this important opportunity to improve the caliber of American railroading will be welcomed by the editor.

DIESELS ON THE D. & R. G. W. have to work harder than diesels on many roads because they have grades and curvature to overcome that, mile for mile, are pretty much at the head of the class in this country. A description appears herein (page 68), of the inspection and maintenance program set up by this road, of the adaptation to railroad requirements of precision laboratory control of lubricant quality and parts replacement, and of the teamwork arrangement whereby the mechanical and operating departments contribute together to the successful functioning of this program.

SECURITY ANALYSTS from all over the country met last week in San Francisco to talk about industry's future revenue and profit prospects, and a good share of their attention was devoted to the railroads. Our reporter sums up the conclusions of these experienced students of balance sheets and traffic potentials in one encouraging word—optimism. A summary of the activities of the analysts' railroad section appears in this week's news pages.

PERSONNEL CHANGES in government agencies dealing with the railroads are noted in the news this week, among them election of J. Haden Alldredge as chairman of the Interstate Commerce Commission; the retirement of D. W. Knowlton as I.C.C. chief counsel and the selection of E. M. Reidy as his successor; the appointment of David E. Smucker, formerly chief operating officer of the Long Island, as director of the Rail Transport Division of the Defense Transport Administration; and the Senate confirmation of Jack Garrett Scott as undersecretary of commerce for transportation.

NEWS FROM THE POTOMAC includes net income estimates for the Class I railroads of $51 million and $142 million for March and the first three months, respectively, of this year, as compared to $54 million and $106 million, respectively, for the corresponding periods in 1951. The Missouri Pacific and Southern Pacific and affiliated and subsidiary lines have applied to the I.C.C. for authority to raise passenger fares 10 per cent, a move in which other western roads have not joined. The trainmen's top brass have been pondering over another wage increase demand, to be based on "increased productivity of employees." The conductors, engineers and firemen want the Supreme Court to pass on government seizure of railroads as well as seizure of steel mills.

THE WESTERN MARYLAND celebrates its 100th anniversary on May 27. That railroad—yesterday and today—is the subject of this issue's first feature article, beginning on page 53. President of the Western Maryland is W. Arthur Grotz, who assumed that office on May 1 (Railway Age, April 21, page 18, and April 28, page 54). Photographs of other principal Western Maryland officers appear on page 64 of this issue, with the exception of William C. Purnell, vice-president and general counsel, who has held that position since 1948 and has been in the road's law department since 1931.

TRUCK TRAFFIC DECLINED during April, continuing a trend noted by some operators as early as February. For some the pinch has been slight, but tonnage losses of 15 per cent or more have been reported by many —at a time when there is normally a traffic upswing. Railway Age has verified a report that about 50 per cent of the 1,000-odd members of the Central States Motor Freight Bureau are now operating in the red. On May 6 bureau members began charging a $1.50 fee in addition to regular rates on all shipments under 5,000 lb. Most operators consider the trouble stemming from two factors: (1) slowing civilian purchasing; and (2) slowing defense production.

MOUNTING EQUIPMENT LOANS — of 42 important railroads, 17 will in 1952 have maturities of equipment trusts and conditional sales contracts which will exceed their charges to equipment depreciation, according to a compilation by the New York Stock Exchange firm of R. W. Pressprich & Co. Of these 17 there are four with equipment maturities which will exceed total depreciation charges, including roadway as well as equipment. Of the 42 railroads, 24, or 57 per cent, now have equipment debt in excess of one-fourth of total indebtedness and on four of the roads equipment obligations constitute more than half of total debt.

"SOME DAY THE RAILROADS will become commercial-minded," Patrick B. McGinnis, chairman of the board of the Norfolk Southern, told the New York Society of Security Analysts in a recent luncheon address. They will then, he added, "go after" the anomalous situation under which railroads, as bulk carriers, must operate at retail carload rates, while contract truckers, essentially retail carriers, can operate under bulk rates. The United States economy, Mr. McGinnis added, is based on quantity rates. "Macy's would starve if it had to sell at the same prices as the corner store," he pointed out.

Whitman, McGanney, See Good Outlook for Western Railroads — Except for Taxes

Population growth, industrial development and greater railroad efficiency should increase both revenues and profits, security analysts are told at San Francisco

Optimism—tempered, however, by the "universal" problem of taxes—as to future revenue and profit prospects of major western railroads, was expressed at San Francisco on May 5, at the railroad section of the fifth annual convention of the National Federation of Financial Analysts Societies.

Speakers at the rail session were Daniel J. McGanney, vice-president of the Southern Pacific, who discussed the business and revenue outlook; Frederic B. Whitman, president of the Western Pacific, whose subject was the outlook for western railroad profits; and David A. Hill, Chicago railroad consultant, who gave the analysts' viewpoint. Pierre R. Bretey, railroad analyst for the New York Stock Exchange firm of Baker, Weeks & Harden, and president of the N.F.F.A.S., presided at the railroad meeting, in the absence, because of illness, of the announced chairman, Walter F. Hahn, of Smith, Barney & Co., also of New York.

Business Outlook Favorable

"I feel," Mr. McGanney told the railroad security analysts, that "the outlook for business and revenue of these western lines, both for the short term and the long term, is favorable. Business cycles and national and international conditions will naturally affect traffic volume for varying intervals, but, in the main, the trend of business and traffic in the area under consideration is moving steadily upward. . . .

"My optimistic outlook for business and revenue for these western railroads stems from several factors—the constantly and rapidly increasing population; the steady growth of industrial development; the expanding agricultural, forestry, petroleum and chemical developments, and our other abundant natural resources. . . .

Passenger Traffic

"Passenger traffic is influenced to a large degree by the same general factors which affect freight traffic. . . . That these factors have been favorable is indicated by the fact that, in spite of greatly increased private automobile, air and bus competition, passenger business is increasing on the four lines under consideration." [S.P.; W.P.; Santa Fe, and Union Pacific]

The balance of Mr. McGanney's talk was devoted to a detailed analysis of the various growth factors behind what he had described as his "optimistic outlook" for western railroads. He mentioned particularly increasing population; natural resources; and industrial development—both "location of warehouses and distributing plants, including assembly and sub-assembly plants, for manufactured products from other areas to serve the expanding markets of the West and Southwest, and, second, primary production plants for conversion of the abundant raw materials available in the territory."

He also analyzed recent western expansion, and increased railroad traffic resulting therefrom, in steel, copper, aluminum, forest products, petroleum, chemicals, aircraft manufacture and agriculture, concluding with the observation that this "tremendous development" means a "good outlook" for business and revenue of western railroads.

Confirming Mr. McGanney's observations, Mr. Whitman began his talk by saying: "The railroads of the West have, during the decade just past, witnessed a very large growth in traffic originating in and destined to their territory."

"They have not," he continued, "been content to attempt to meet this result of World War II and the intensive industrial development of the Pacific Coast with the equipment and practices of 1940. Had they done so, few, if any, of them would still be in business—at least in private hands.

"By the same token the railroads of the West have no thought of trying to handle 1960 business with what they have today. Faced with subsidized competition in the air and on the highways, and skyrocketing costs of operation, the railroads know they must not let down for a moment in the constant search for better methods and streamlined operation. To do so means red ink."

He next reviewed recent technical developments "vital to the financial health of western railroads," and added that "if we can't do today's job with yesterday's tools it follows that we shall not be able to do tomorrow's job with the tools of today. In full awareness of this axiom, western railroads

SIGHTSEEING IN CHICAGO—for the National Federation of Financial Analysts—consisted of an escorted tour of the Chicago & Western Indiana and the Belt of Chicago followed by a trip through the LaGrange, Ill., plant of the Electro-Motive Division of General Motors. The group is on a 3-week tour of the west and southwest by special train to study railroads and other industrial facilities in a number of key cities.

A special "breeze conditioned" observation train (above), made up by the Western Indiana and Belt for the inspection trip included a group inspection car loaned by the Baltimore & Ohio Chicago Terminal (visible at rear of train). After an inspection of the Electro-Motive plant, the analysts ate luncheon at the plant cafeteria and heard an address by N. C. Dezendorf, G.M. vice-president and general manager of E.M.D., on the company's long range planning.

have underway or planned huge expenditures that will enable them to further streamline their operations and keep in the van of progress, with dividends for their shareholders despite constantly rising prices and subsidized competition. Examples may be cited on every western railroad."

The W.P. president then described some of the major improvement projects now under way in the West, including announcement, reported in more detail elsewhere in this issue, of his own company's plans to spend over $53 million on new facilities in the five-year period from 1951 through 1955. He expressed the belief that these expenditures "will be reflected in future profits," but concluded his talk with this less optimistic discussion of the railroads' tax situation:

"Regardless of how much traffic, freight and passenger, our solicitors are successful in securing for the railroads and regardless of how much money we are able to save by dieselization, mechanization, C.T.C. and what have you, there will be no profits if taxes continue to ride like unguided missiles toward the stratosphere.

"During the past seven years total taxes paid by the Western Pacific company amounted to $41,387,854, while the owners received in dividends $19,323,808, or less than half. That is bad enough as an average, but taking 1951 alone taxes were $10,998,966 against dividends of $3,031,805. The owners got less than one-third as much out of a very successful business year as did the tax collector. The trend is obvious.

"But even this dismal picture does not quite reflect the true situation. For out of the already taxed-into-the-ground profits which the shareholder does receive he must pay another personal income tax. Assuming for the sake of conservatism that all Western Pacific shareholders are in the lowest income tax bracket, another $618,488 out of revenues found its way to the tax collector in this manner, leaving what might be called 'take home dividends' of $2,413,317 to the owners, while the government took a grand total of $11,617,454, or almost five times as much.

Plenty of Problems

"There are plenty of problems facing the railroad industry in its struggle to maintain a bright outlook for profits. Those which fall within the province of railroad management can, I am confident, be solved. The problem of taxes, however, is a universal one threatening not only the railroads but all of industry, and what we are still unable to find a better term for than the 'American Way of Life.' Congressional action as a result of overwhelming public demand appears to be the only hope of meeting this situation, and in this demand I enlist your aid."

Mr. Hill, in concluding the session, emphasized the importance to railroads of not only "good," but "superior" management, and complimented both the S.P. and the W.P. in that respect.

The San Francisco meeting, of which the railroad session was a part, was the first of its type to be held outside of New York. Total registration of security analysts, wives and guests approximated 700; some 250 of these came from eastern and midwestern cities on a special train which left Chicago on the Chicago, Burlington & Quincy on April 30. From Denver, the train, originally routed over the Denver & Rio Grande Western, was rerouted to Salt Lake City via the Union Pacific because of slides in the approaches to the Moffatt tunnel and flood conditions south of Salt Lake City. The Western Pacific was used from there to San Francisco, with re-

turn routing via the S.P. to New Orleans and the I.C. to Chicago.

At Chicago, before the train's departure, the entire group participated in a trip over facilities of the Chicago & Western Indiana and in a visit to the Electro-Motive Division's plant at La Grange. Rail analysts in the party visited D.& R.G.W. yards at Denver, while inspections of rail facilities were also scheduled at San Francisco, Los Angeles, Houston, New Orleans and Chicago, where the I.C.'s Markham yard is on the return itinerary.

1952 Net Income Totals $142 Million

Class I railroads in the first three months this year had an estimated net income, after interest and rentals, of $142,000,000, according to the Bureau of Railway Economics, Association of American Railroads. The 1952 figure compares with net income of $106,000,000 in the corresponding period last year.

Net railway operating income for the first three months of 1952 totaled $218,601,209. In the like 1951 period, the total was $178,597,152.

Estimated results for March 1952 showed net income of $51,000,000 compared with $54,000,000 in the same month last year. Net railway operating income for March was $76,638,824. In March 1951 it was $80,312,076.

In the 12 months ended with March, the rate of return averaged 3.89 per cent, compared with 4.32 per cent for the 12 months ended with March 1951.

Gross in the first three months of 1952 amounted to $2,587,471,939 compared with $2,440,285,731 in the same period of 1951. Operating expenses amounted to $2,010,191,343 compared with $1,931,462,248.

Twenty-three Class I roads failed to earn interest and rentals in the first three months this year. Nine were in the Eastern district, one in the Southern region and 13 in the Western district.

Class I roads in the Eastern district in the first three months of 1952 had an estimated net income of $52,000,000 compared with $26,000,000 in the same period of 1951. For the month of March alone, their estimated net income was $18,000,000 compared with $22,000,000 in March 1951.

Those same roads in the first three months had a net railway operating income of $95,204,971, compared with $62,658,962 in the same period of 1951. Their net railway operating income in March amounted to $32,679,761, compared with $33,162,958 in March 1951.

Gross in the Eastern district in the first three months of 1952 totaled $1,159,808,290, an increase of 6.4 per cent compared with the same period of 1951, while operating expenses totaled $929,130, 473, an increase of 3.8 per cent.

Class I roads in the Southern region in the first three months of 1952 had an estimated net income of $33,000,000 compared with $26,000,000 in the same period of 1951. For the month of March alone, they had estimated net income of $12,000,000 compared with $10,000,000 in March 1951.

Those same roads in the first three months had a net railway operating income of $44,334,778 compared with $40,368,257 in the same period of 1951. Their net railway operating income in March amounted to $16,163,453 compared with $17,275,214 in March 1951.

Gross in the Southern region in the first three months of 1952 totaled $390,378,335, an increase of seven per cent compared with the same period of 1951, while operating expenses totaled $281,792,496, an increase of 1.9 per cent.

Class I roads in the Western district in the first three months of 1952 had an estimated net income of $57,000,000 compared with $54,000,000 in the same period of 1951. For the month of March alone, they had an estimated net income of $21,000,000 compared with $22,000,000 in March 1951.

Net Operating Income

Those same roads in the first three months had a net railway operating income of $79,061,460 compared with $75,569,933 in the same period of 1951. Their net railway operating income in March amounted to $27,795,610 compared with $29,873,904 in March 1951.

Gross in the Western district in the first three months of 1952 totaled $1,037,285,314, an increase of 5.2 per cent compared with the same period of 1951, while operating expenses totaled $799,268,374, an increase of 5.2 per cent.

CLASS I RAILROADS—UNITED STATES

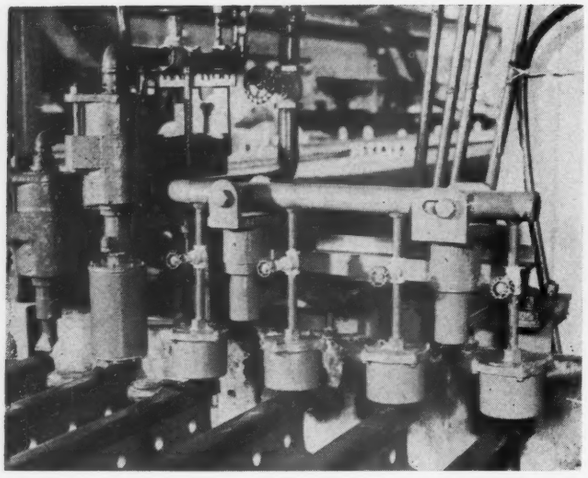
	1952	1951
	Month of March	
Total operating revenues	$ 875,471,342	$ 875,600,318
Total operating expenses	675,135,230	677,758,046
Operating ratio—percent	77.12	77.40
Taxes	109,556,719	101,436,762
Net railway operating income (Earnings before charges)	76,638,824	80,312,076
Net income, after charges (estimated)	51,000,000	54,000,000
	Three Months Ended March 31	
Total operating revenues	2,587,471,939	2,440,285,731
Total operating expenses	2,010,191,343	1,931,462,248
Operating ratio—percent	77.69	79.15
Taxes	316,254,128	282,526,069
Net railway operating income. (Earnings before charges)	218,601,209	178,597,152
Net income, after charges (estimated)	142,000,000	106,000,000

I.C.C. Makes Alldredge Chairman; Salutes Rogers

Interstate Commerce Commissioner J. Haden Alldredge has been elected chairman of the commission for one year from May 1.

He succeeded John L. Rogers, who retired April 30 from membership on the commission—"upon the urgent advice of my physician." (*Railway Age* of March 31, page 17, and April 28, page 18). The commission has made public a letter which Mr. Rogers' former colleagues sent him on April 30 to commend his service. Also, Mr.

ONE OF THE CANADIAN PACIFIC'S new restaurant counter cars recently placed in service to feed immigrants traveling by rail from eastern Canadian ports to points across the country. The new cars, designed by the road's sleeping and dining, colonization and mechanical departments after tests with stripped-down standard diners proved the need for new equipment, are expected to feed over 50,000 of the immigrants the C.P. will carry this year.



Rail ends, moving from right to left, pass beneath radiant burners in Colorado Fuel & Iron Corp. rail mill in Pueblo, Colo. The four small burners preheat the end to 1,000 degrees. The larger element raises temperature to 1,600 degrees; small pipe at extreme left is air quench.

This panel of automatic Vernier controls moves tons of rails through various heating and cooling stages of the new end-hardening system. After requisite heating time the controls click and rails are moved to a different stage of the hardening process.

New Rail-End Hardening Process Developed by Colorado Fuel & Iron

Heat has become a precision tool at the Colorado Fuel & Iron Corp. rail mill in Pueblo, Colo., where rail ends are toughened to required hardness in mere minutes through application of the newest concept of radiant heat processing. "Basic advances in locomotive design and transportation engineering have demanded higher standards of rail production," says W. S. Boyce, general manager of C.F. & I. railroad sales. "Engines and cars today are built for better performance and bigger payloads. That's why extra skill invested in rails pays off."

These end-hardened rails are "engineered in advance, manufactured by modern mass production methods and delivered to the railroad ready for fast, economical installation." Their use reduces end-batter, and generally results in longer rail life.

The new process utilized by C.F. & I. is described as completely automatic. Selas radiant burners—providing high temperatures, automatic operation, precise control and protective atmospheres—have been installed in the production units of the Pueblo rail mill. As finished rails move out of the mill they pass beneath the burners. No flame is visible, although there is a distinct roaring sound as streams of fuel and air combine. Electric timing devices keep the rail ends beneath each burner for a predetermined time. Four preheat elements bring the temperature up to about 1,000 degrees. A final blast of scorching heat raises the temperature to 1,600 degrees and then a sudden blast of cold air under 100-lb. pressure provides proper quenching for hardening the steel.

Hydraulic conveyors have been installed to move rails through the various stages with precise timing. After the necessary heating time the automatic timers click and tons of rails move forward to the next stage of heating. The metallurgy of the rail, its sectional dimension and physical characteristics are all rigidly controlled. End hardening is applied to control-cooled rails. The hardened area covers the full width of the rail head and extends back 1½-in. from the rail end. The treated zone is at least one-half in. deep, with a Brinnell hardness ranging from 331 to 401.

The new equipment is designed to provide uniform pattern, location and hardness of the treated zone. "Pioneering methods of guesswork have not provided the uniformity essential to full realization of the potential benefits obtained from end hardening," according to J. Hart Reece, C.F. & I. chief metallurgist. When Colorado Fuel & Iron began end-hardening rails in 1935, it was pointed out, the process employed an old-fashioned heat "gun," timed for three minutes by a simple sand glass—the method used to time boiling eggs.

These outmoded old "guns" were the first development of rail end-hardening at C. F. & I. mills in Pueblo, nearly twenty years ago.

Rogers, who is an attorney, has been admitted to practice before the commission.

Chairman Alldredge has been a member of the commission since 1939. He is now serving the first year of a new seven-year term for which he was reappointed by President Truman and confirmed by the Senate in January. The term will expire December 31, 1958.

Mr. Alldredge previously served as commission chairman during the calendar year 1943. Before his appointment to the commission he served on the staffs of the Alabama Public Service Commission and the Tennessee Valley Authority.

The April 30 letter to former Chairman Rogers was signed individually by each of his 10 former colleagues. It read as follows:

"Your retirement from active service is a great shock to your colleagues. We are much distressed that our close relations with you are severed.

"You have been connected with our commission longer than all but one of us.

Almost your whole business life has been spent with the commission, in positions of always increasing difficulty and responsibility. Twice we have called you to head us as chairman. By education and training you have made yourself peculiarly qualified for these tasks, especially as you have possessed unusual capacity for carrying heavy work loads with the skill and confidence which come from wide and thorough experience. Your high ideals of public service, and your courage and conscientiousness in performing official duties are recognized by all, but are best known to us, who have worked with you daily for years.

"Our personal relations, as you know, constantly have been pleasant. You have worked with us in team, and often have resolved probable discord into harmony. Each of us is indebted to you for having relieved us many times from individually assigned duties, unselfishly disregarding your personal interests and convenience—often, we now fear, at the expense of your own health.

"As you leave us, we each assure you of our affectionate regard and deep respect, and we express our earnest wish that leisure and rest may soon so restore you that you will enjoy many years of further usefulness and well earned happiness."

I.C.C. Won't Kill Suspended Rail-Barge Rate Order

The Interstate Commerce Commission has refused to vacate its indefinitely suspended order designed to require railroads and water carriers on inland waterways to establish through routes and joint rates reflecting differentials under all-rail rates.

In a second supplemental report in the proceeding involved (No. 26712), the commission denied petitions seeking vacation of the order which were filed by railroads and the Mississippi Valley Barge Line Company. The order was indefinitely postponed by the commission last January with consent of all respondents in the case. (*Railway Age* of January 7, page 14, and February 4, page 94.)

In its present report, dated April 21, the commision said it did not consider it would be justified in vacating the order in view of the fact that "there has been no expressed change in the Congressional policy with respect to rail-water transportation on the Mississippi river system." The commission added that "since the order is in abeyance, it can hardly be a source of immediate harm either to Valley or the rail respondents."

Car, Locomotive Builders Would End Unit Controls

Elimination of unit production controls governing the output of freight cars and locomotives has been recommended to the National Production Authority by its industry advisory committees which represent the car and locomotive builders.

The unit production controls fix the number of cars and locomotives which must be produced out of each quarter's allocations of controlled materials. Their elimination would be "one means of accelerating the lagging" freight-car program, the Railroad Contract Car Builders Industry Advisory Committee advised N.P.A. at an April 23 meeting.

At a similar meeting on the following day, the Locomotive Builders Industry Advisory Committee voiced that industry's desire for early removal of controls over their unit production.

The car-builders committee also recommended that N.P.A. issue more tickets under the Controlled Materials Plan to enable that industry to get more materials. As an N.P.A. press release reported the meeting, the committee members "emphasized that they have no complaint against their production schedules, but explained their principal difficulty is the lack of enough C.M.P. tickets to obtain materials needed to maintain a high rate of production."

In its report on the meeting of the locomotive-builders committee, N.P.A. revealed that it is sending to companies in that industry a questionnaire asking information on current production and anticipated maximum plant capacity up to 1956, taking into consideration the installation of new equipment and facilities scheduled by each company. These data, the N.P.A. statement added, are needed by "claimant agencies interested in procuring locomotives if an all-out mobilization occurs."

Also, the industry has been requested to form a metallurgical task group to seek ways of reducing the nickel content in diesel-electric locomotives and conserving other alloys. N.P.A. representatives at the meeting said that agency would consider appeals for assistance from those companies having difficulty in procuring wide steel plates for fireboxes.

Bond Purchases Can't Build Invested Capital Tax

Railroads which have been relieved of income taxes on "profits" realized from purchases of their own bonds or other obligations at discounts, may not include such "profits" in their invested capital as determined for excess-profits-tax purposes.

That is the effect of a ruling by the United States tax court which has become final as a result of the United States Supreme Court's refusal to review it. The ruling was made in a case involving the Bangor & Aroostook's "invested capital," the road having undertaken to include a "profit" of $136,446.70 which it realized from the purchase for $497.553.30 of its own bonds having a face value of $634,000.

Pursuant to applicable relief provisions of the Internal Revenue Code, no income tax had been paid on the "profit," but the B. & A. contended that the $136,446.70 was nevertheless "income," properly included in the accumulated - earnings - and - profits item which entered the invested-capital total. The tax court rejected the contention.

The Southern was an intervener in the case. It supported the B. & A. position.

Supreme Court Action

The Supreme Court has refused to review a case in which a train crew on the Atlantic Coast Line was alleged to have been negligent and precipitated a grade crossing accident.

This action by the high court left intact a lower court's determination against the railroad. The case was the *Atlantic Coast Line v. Freeman.*

According to statements filed with hte high court, Mr. Freeman was killed in an automobile-passenger train collision at a grade crossing near Birmingham, Ala. Mrs. Freeman filed suit. A key point in the case was whether the engineer of the passenger train sounded the train whistle in the prescribed manner as the train approached the crossing.

Members of the crew joined the engineer with statements that the prescribed signals were given. Other witnesses gave like testimony, while still others testified the whistle was not heard until the train was almost at the crossing. The jury accepted the latter's view, and returned a verdict against the railroad.

Broad Fourth-Section Relief For West Grain Movements

The Interstate Commerce Commission has issued a 6-to-4 decision granting the railroads authority to continue and to establish carload rates on grain, grain products and related commodities, within the Western district, without observing the long-and-short haul clause of the Interstate Commerce Act's Section 4. The decision, dated April 21 and made public May 7, em-

SEVENTY YEARS OF SERVICE—all of them with the Chicago & North Western —have earned for John P. O'Connor (left) a special commemorative pin here being presented to him by Paul E. Feucht, executive vice-president. Mr. O'Connor, who is 85, began his railroad career in 1882 as a call boy. Today he is agent for the North Western at Harvard, Ill., and he plans to continue in that capacity.

braced numerous fourth-section applications, the title case having been Fourth Section Application No. 16500.

In granting the relief involved, the commission imposed no circuity limitations. Commissioner Aitchison filed a dissenting expression to which Commissioners Lee and Johnson subscribed. The dissent of Chairman Alldredge was also noted, as was the fact that former Chairman Rogers (who retired April 30) did not participate in the disposition of the case.

In explaining its failure to impose circuity limitations, the commisson majority noted that all parties of record had opposed a circuity rule. "The transportation of grain and grain products, and the storage and milling in transit of these commodities," the report said, "appear to require complete freedom of movement. The imposition of circuity limitations would no doubt work a great hardship on the carriers as well as the industry, and apparently would not be in the interest of the public."

At the same time, the commission also said that the foregoing statement "is not to be taken as approval of all of the present circuitous routes, as some revision is certainly in order. A number of routes are shown that seem to be beyond all reason, but the matter will be left to the carriers in the first instance. Applicants should at once carefully study their tariffs, scrutinize each unusually circuitous route . . . and eliminate such routes as are not worth while or for which there is no justification in sound reason and common sense."

Commissioner Aitchison's dissenting expression was a brief statement to the effect that the majority failed to meet the act's requirements for the granting of fourth-section relief.

Freight Car Loadings

Loadings of revenue freight in the week ended May 3 totaled 744,592 cars, the Association of American Railroads announced on May 8. This was a decrease of 34,810 cars, or 4.5 per cent, compared with the previous week; a decrease of 58,745 cars, or 7.3 percent, compared with the corresponding week last year; and an increase of 596 cars, or 0.1 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended April 26 totaled 779,402 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, April 26

District	1952	1951	1950
Eastern	133,278	144,911	139,624
Allegheny	163,556	170,507	156,913
Pocahontas	59,347	63,419	62,056
Southern	134,859	131,241	125,534
Northwestern	118,091	131,378	85,229
Central Western	112,819	122,105	117,095
Southwestern	57,452	61,101	58,844
Total Western Districts	288,362	314,584	261,168
Total All Roads	779,402	824,662	745,295
Commodities:			
Grain and grain products	40,221	49,711	44,068
Livestock	10,592	9,888	9,788
Coal	142,278	143,314	152,474
Coke	14,985	16,255	14,391
Forest products	45,280	49,237	42,467
Ore	77,463	78,417	26,042
Merchandise l.c.l.	72,408	79,894	84,974
Miscellaneous	376,175	397,946	371,091
April 26	779,402	824,662	745,295
April 19	735,097	810,022	722,688
April 12	690,660	777,989	707,385
April 5	707,142	739,523	700,049
March 29	725,423	755,435	720,404
Cumulative total 17 weeks	12,250,368	12,646,154	10,999,422

Court Upholds I.C.C. In Chicago Livestock Case

The Supreme Court has upheld an Interstate Commerce Commission ruling that Swift & Co. is not entitled to delivery of livestock at a proposed new plant in the Chicago stockyards area without paying switching charges in addition to line-haul rates. The decision affirmed a lower court's findings in favor of the commission ruling.

Effect of the decision is to leave intact the 70-year old arrangement for "centralized delivery" of livestock to Chicago's Union Stock Yards. The case was titled *Swift & Co. v. United States.*

The commission order under attack was issued in July 1949. At that time the commission refused to require the Chicago Junction and its trunk-line connections to enter joint arrangements for delivery, without charge in addition to line-haul rates, of livestock shipments to the proposed new Swift plant. Among other things, the commission held that extension of such a service to other Chicago packers who might demand it would "seriously interfere with, delay and disrupt" the Chicago Junction's operations. (*Railway Age*, July 23, 1949, page 45).

Swift contended that charges on direct carload shipments of livestock to the proposed new plant were unreasonable and unduly prejudicial. It asked the commission to prescribe "reasonable joint through rates," and said livestock should be delivered to its industrial siding at a joint rate not exceeding the normal line-haul rate to Union Stock Yard unloading pens.

Reviewing the operating difficulties and crowded conditions which the railroads face in serving the stockyards area, the Supreme Court opinion said:

"The delivery of livestock through this bottleneck of Ashland Yards must be geared to provide for the expeditious and special handling that livestock must receive. The huge quantities of 'dead freight' which are handled and the restricted facilities of Ashland Yards have resulted in the development, over a period of 70 years, of a complicated intricate pattern of operation. For this reason, any attempt to change the pattern calls for the most expert consideration and administrative judgment—a task that courts are ill-fitted to perform. If the commission gave weight to the relevant factors, its decision should not be overturned."

NOT A SINGLE TRACE of Victorian styling is evident in this view of the newly remodeled Missouri Pacific passenger station at Sedalia, Mo. Yet the building was actually erected in 1883. In addition to the usual facilities for passengers, mail, baggage and express, the modernized building contains offices for the local special agent, claim agent and district traffic officers, a locker room with showers for engine crews, and an assembly room 13 feet by 33 feet.

A discussion of the commission's 1949 report followed, and the court found the administrative judgment of the commission was "based on findings abundantly supported by the evidence."

The court's decision was 6-to-3, and the majority opinion was by Justice Minton. Dissenting opinions were by Justice Reed, with Justice Douglas concurring, and by Justice Frankfurter. The latter would have sent the case back to the I.C.C. because the commission's report "does not speak with the needed clarity." Justices Reed and Douglas thought the existence of joint through rates on freight other than livestock created undue preference for such freight over livestock.

U.P. Safety Film Wins Merit Award

A Union Pacific accident prevention motion picture film has been chosen for an award of merit by the National Committee for Films on Safety. William Englander, secretary of the committee, said the film, "It Can Happen to You," was one of three to win the merit award in the occupational group of the contest for 1952. The film portrays typical causes of accidents in railroad shops, on the track and in a train to point up the slogan "safety is everybody's job."

D.P.A. Gets D.T.A.'s 4th Quarter Truck, Bus Program

The Defense Transport Administration has submitted to the Defense Production Administration a presentation of fourth-quarter requirements for highway vehicles.

The presentation calls for allocations of materials for building 1,150,000 automobiles, 290,000 trucks, 2,200 integral buses (body and chassis, single unit), 110,000 truck bodies (including 5,000 school bus bodies), and 16,000 trailers. It also calls for $540 million of automotive replacement parts.

The presentation covers vehicles for commercial sale and does not include anything for military or other direct claimants. As noted in *Railway Age* of May 5, page 12, D.T.A. has also submitted its fourth-quarter program for railroad equipment.

I.C.C. Refuses to Study Export Grain Port Costs

The Interstate Commerce Commission has denied a petition which asked it to investigate terminal services and costs involved in handling export grain at Atlantic ports. The petition was filed by the cities of Baltimore, Md., and Philadelphia, Pa., and commercial and civic groups of both municipalities.

In rejecting the request, the commission noted it already has under investigation suspended tariffs in which rival groups of railroads are proposing rate cuts in connection with their competition for ex-lake grain moving for export. In those proceedings (I. & S. Nos. 5641 and 5990), the commission said, "the facts and circumstances affecting the transportation of grain for export to the ports concerned should be sufficiently developed to permit the commission to determine the issues raised." (*Railroad Age* of February 11, page 15, and March 10, page 94.)

Senate Approves Scott as Commerce Undersecretary

The Senate on May 5 confirmed President Truman's appointment of Jack Garrett Scott as Undersecretary of Commerce for Transportation. The nomination had been reported favorably on May 1 from the Senate Committee on Interstate and Foreign Commerce.

The favorable report followed a brief public hearing at which there was no opposition to Mr. Scott's appointment. The committee's chairman—Senator Johnson, Democrat of Colorado—said both he and Senator Millikin, Republican of Colorado, endorsed the appointee. Mr. Scott practiced law in Colorado for several years.

In the course of the hearing, Senator Johnson asked Mr. Scott if he planned to have on his staff at the Department of Commerce "someone who is well informed on railroad transportation." The senator expressed concern about the railroad situation, which he called

Jack Garrett Scott

"bad"; and he went on to say he hoped Mr. Scott would have among his assistants "someone who is a well recognized authority" on railroad matters.

Mr. Scott replied that he hadn't yet "reached that bridge," but he assured the senator he would give the matter "very serious consideration" in assuming the undersecretaryship.

As reported in *Railway Age* of April 28, page 18, Mr. Scott at the time of his appointment, was practicing law in Washington, D. C., specializing in transportation matters; and he was also general counsel of the National Association of Motor Bus Operators.

He was born in Oberlin, Kans., September 28, 1895, and was graduated from the University of Colorado in 1917 with an A. B. degree. He received his LL. B. from the University of Denver in 1921. Meanwhile, Mr. Scott had served in the Navy during the period from his graduation from college until August 1, 1919

He was admitted to the Colorado Bar in 1921, and he was in private practice at Antonito, Colo., during the 1921-24 period, and at Denver during the 1924-33 period. Mr. Scott came to Washington in November 1933, as an attorney on the staff of the former National Recovery Administration. He subsequently served N.R.A. in various other legal positions, including those of associate counsel and acting general counsel.

In September 1935, Mr. Scott joined the staff of the Interstate Commerce Commission as chief attorney in the Bureau of Motor Carriers He continued in that capacity until January 1942, when he became general counsel of the former Office of Defense Transportation. He resigned from that position to reenter private practice in July 1944.

British Gas-Turbine Locomotive Fuel

Since publication of the description of the British 3,000-hp. gas-turbine locomotive in the April 21 issue of *Railway Age*, inquiries have been received as to the type of fuel burned.

The fuel is gas oil. This is an indefinite term which covers an indeterminate crude oil fraction, ranging from gasoline down to residual fuels, or any part of that range. Because of the extensive market for heating oils and diesel fuels in the United States, the gas-oil is broken down into a number of fractions for these markets and the gas oil, itself, has very little significance as a consumer product.

Illinois Grants 6% Freight Rate Increase

The Illinois Commerce Commission has authorized railroads within the state to increase freight rates on intrastate traffic six per cent.

The increase, which is in line with the "second installment" of Ex Parte 175 increases authorized by the Interstate Commerce Commission, was granted almost immediately after the roads presented their case before Examiner Forrest B. McElroy on April 30. The new Illinois rates went into effect on May 2, except on grain and grain products, which become effective May 17.

Chain Store Traffic Group Hits L.C.L. Service

Members of the Chain Store Traffic League, at the group's annual meeting in Cincinnati on April 30 and May 1 and 2, passed a resolution asking railroad management, through the Association of American Railroads, to establish a standing committee to deal with "deplorable" l.c.l. service.

"Delays in l.c.l. are causing mer-

chants large losses in the way of lost sales and unbalanced inventories of goods unnecessarily tied up in transit by rail," the resolution stated.

Officers elected for the coming year are: A. H. Nelson, S. H. Kress Company, New York, president; J. N. Dill, G. C. Murphy Company, McKeesport, Pa., eastern vice-president; G. A. Matz, Walgreen Drug Company, Chicago, western vice-president; G. L. Moran, Western Tire & Auto Co, Kansas City, Mo., southwestern vice-president; and F. M. Daly, J. J. Newberry Company, New York, secretary-treasurer.

David E. Smucker Heads D.T.A. Railroad Division

David E. Smucker, assistant chief engineer of the Pennsylvania, has been appointed director of the Defense Transport Administration's Railroad Transport Division. He succeeds Elmer J. Stubbs, who resigned April 15 to return to his former position as assistant vice-president of the Erie. (*Railway Age*, April 28, page 14).

Mr. Smucker's appointment was effective May 6. The new director has held various positions on the P.R.R.

David E. Smucker

and its subsidiaries since 1929, chiefly in the engineering and operating departments He served as general manager of the Long Island from March 1948 to April 1949, and was subsequently co-trustee and chief operating officer of the L.I. He resigned the latter position in December 1950, but continued for some time as consultant to the new trustee, William A. Draper, Jr. His career on the Pennsylvania was outlined in *Railway Age* of March 6, 1948, page 78.

Reidy Succeeds Knowlton As I.C.C.'s Chief Counsel

Daniel W. Knowlton retired on April 30 as chief counsel to the Interstate Commerce Commission and has been succeeded by E. M. Reidy. Mr. Reidy thus became head of the commission's Bureau of Law in which he has served for more than 35 years, the last 3¼ of them as associate chief counsel.

Mr. Knowlton, who was born April 7, 1881, in West Upton, Mass., reached the compulsory retirement age under civil service regulations a year ago; but the commission retained him for an additional year. He plans to practice law privately in Washington, D.C.,

Daniel W. Knowlton

and he has been admitted to practice before the commission.

Mr. Knowlton received his education at Pomfret School, Pomfret, Conn., and at Harvard University, where he was awarded an A.B. degree in 1903. He received his legal education at Harvard Law School, and was in private practice at New York from 1907 through 1909. For several years thereafter, he

E. M. Reidy

was in private practice at Colorado Springs, Colo., that practice having been interrupted for military service in the 1916-18 period.

He entered the commission's service in 1922 as a member of the board of referees which was part of the machinery for determining settlements due railroads for the government's use of their properties during the World War I period. Mr. Knowlton became one of the commission's attorney examiners in 1924, and the following year he was appointed assistant chief counsel. He was promoted to chief counsel in July 1928.

Mr. Reidy is also a native of Massachusetts. He joined the staff of the commission's Bureau of Law in April 1917, as a clerk. He served in various clerical capacities for the next three years, during which time he studied law at Georgetown University. He holds degrees of Bachelor of Laws and Master of Laws.

Mr. Reidy was appointed attorney in December 1920, and in July 1928 he became junior assistant chief counsel. Next, in turn, he became assistant chief counsel and associate chief counsel, holding the latter position from February 1949 until his present promotion. The notice of the promotion pointed out that Mr. Reidy "for many years, has represented the commission in numerous proceedings in federal courts, including the Supreme Court."

Railroad "Y" Membership Gained in 1951

A net gain of more than 1,400 new members was scored by the Railroad Young Men's Christian Association of the United States and Canada during 1951. Col. Robert S. Henry, chairman of the 1951 membership committee has reported that this gain was made despite the technical loss—by change of status — of the Minnesota Transfer Railroad Y.M.C.A. and its 1,700 members. This unit, he explained, has become the Midway branch at St. Paul and its railroad members are no longer specifically computed as members of the transportation department.

C. & E.I. Tests Trucks For Head-End Traffic

The Chicago & Eastern Illinois has begun an experiment with the use of a truck and trailer unit to handle local mail, baggage and express traffic between Chicago and Danville, Ill. The unit handles head-end traffic formerly handled by train No. 1, a Chicago-Evansville local. The move relieves the train from 20 local stops that were made solely for this class of traffic, thereby rendering the service more attractive to passengers and speeding the handling of head-end traffic to the more important cities the train continues to serve. The truck will make a round trip from Chicago daily.

MORE NEWS ON PAGES 77-99

Additional news appears on page 77, with regular news departments beginning on the following pages:

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Supply Trade	**78**
Abandonments	**79**
Car Service	**79**
Equipment and Supplies	**79**
Construction	**80**
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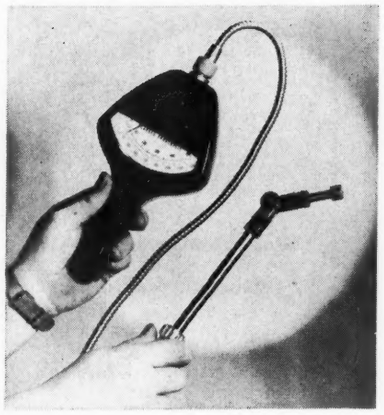
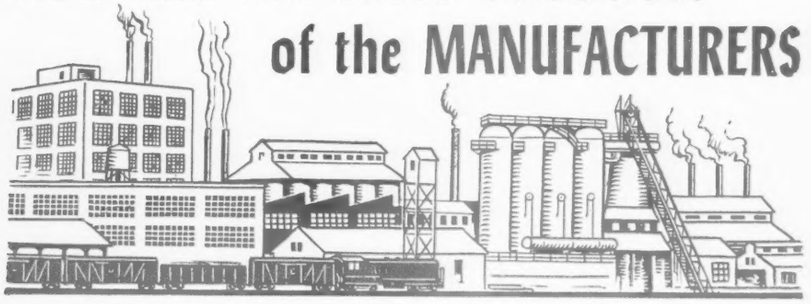


NEW and IMPROVED PRODUCTS of the MANUFACTURERS



Hand Pyrometer With Two Ranges

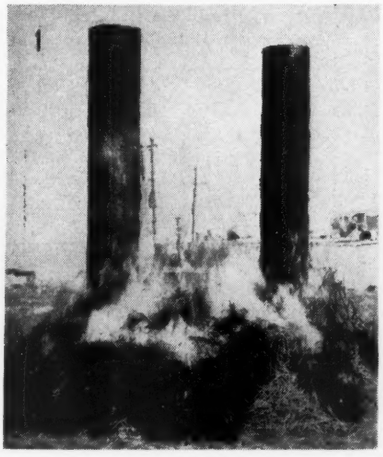
A hand pyrometer with two scale ranges for the rapid and convenient measurement of surface liquid, gas and molten-metal temperature has been announced by the General Electric Company's Meter and Instrument Department, West Lynn, Mass.

Designated as the Type FH-1, the new pyrometer is especially useful where a temperature detector does not need to be installed permanently. Its two scale ranges are 0-500 deg. F., and 0-1,500 deg. F., and the change from one scale to the other is accomplished by the flick of a switch.

Three interchangeable tips include a surface tip, an immersion tip for liquids and molten metals, and a two-prong contact tip. These tips, together with flexible and rigid extension arms, can be easily changed.

The automatic cold-junction compensation feature of the pyrometer eliminates the need for manual adjustment of the pointer for atmosphere. Readings can be made directly from either scale of the instrument.

Fire-Retardant Coating for Vertical Surfaces



To test the fire-retardance of Fireplate, a simulated grass fire (1) was started around two posts—the one at the left coated with Fireplate and that at the right with a bituminous material once proposed as a fire-retardant. In seven minutes (2) both posts were surrounded with flames, but those finding a foothold on the left timber were being extinguished by fire-smothering gases released from the Fireplate. More straw was fed to the fire near the left post, but 16 min. after the fire was started all the straw had burned out (3) and the Fireplate-protected post was free of fire and unharmed.

The Zone Company, a division of Southwestern Petroleum Company, Fort Worth, Tex., has evolved a new product, called Fireplate, for protecting upright bridge timbers from grass fires. When subjected to extreme heat, Fireplate is said to release fire-smothering gases and to "stay put" on vertical wood surfaces. These qualities also make the product suitable for use on telephone and telegraph poles and fence posts.

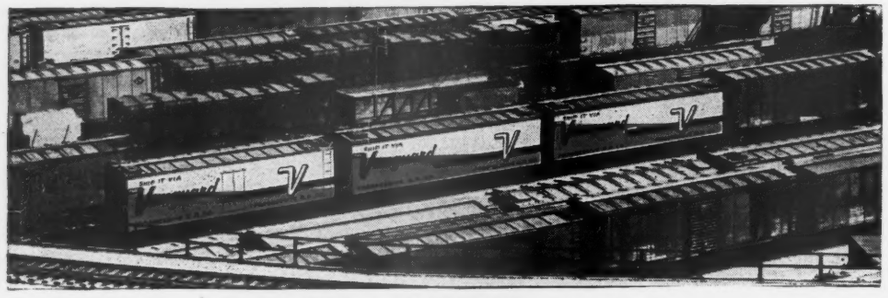
Fireplate was formulated by adding to several bituminous materials fire-retardant chemicals, a jelling agent to minimize melting, a non-inflammable solvent, a plasticizer which in itself puts out fire, and asbestos. These combined ingredients are said to form an incombustible mat over any surface to which applied.

According to the manufacturer, the coating provides fire protection the moment it is applied, primarily because the solvent used is incombustible. Should a fire contact freshly applied Fireplate, this solvent vaporizes quickly and combines with the gases given off by the fire retardant chemicals which are decomposed by the heat.

Fireplate may be applied by brush or spray methods and is furnished in 30-gal. or 55-gal. drums, or in 5-gal. pails.

By adding Fireplate to its previously developed Libbey-Zone process now being widely used by railroads to protect the decks of bridges and trestles from fire caused by red-hot brake shoe fragments, the Zone Company now offers coatings for the complete fire protection of wood railway bridges.

PICK A YARD . . .



ANY YARD . . .

Do your cars STAND OUT like these?

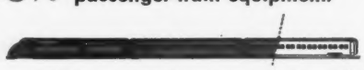
It's a fact that *whatever your freight cars may be*—rolling or resting—they can attract the immediate attention of millions of people, many of whom are prospective shippers. They can reflect—by a smart, well-groomed appearance—forward-looking management.

Are you taking advantage of the potential selling power your freight cars have?

Today more and more alert railroad men are giving their freight equipment that "stand out" look with Du Pont DULUX Railroad Finishes. They find DULUX gives lasting service . . . keeps its high original gloss and color through months of weathering, smoke, hard knocks and cinder blast. These DULUX qualities cut long-run maintenance costs.

DULUX comes in a wide range of line-identifying colors. So make sure your rolling stock catches the public eye. Use Du Pont DULUX Railroad Finishes. E. I. du Pont de Nemours & Co. (Inc.), Finishes Division, Wilmington 98, Del.

85% of America's leading railways* use DUCO lacquer or DULUX enamel on passenger-train equipment.



. . . conclusive proof that the nation's railroads depend on the exceptional qualities of Du Pont DUCO and DULUX Railroad Finishes: outstanding durability and sparkling beauty with a minimum of maintenance.

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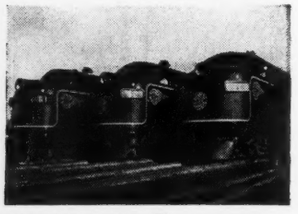
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Railroad Finishes

Finish Facts from DU PONT

Western Maryland—now celebrating century of service—continues to rely on Du Pont finishes



THREE OF A KIND. These spanking-new electromotive diesels, operated by Western Maryland in West Virginia, Maryland and Pennsylvania, are all finished with Du Pont DUCO. Railroad men everywhere see how Du Pont finishes bond securely to metal surfaces and hold up under the blast action of road beds . . . sparkle again after repeated scrubbings.

66,600 POUNDS A MINUTE. This huge crane, one of three operated by Western Maryland at Port Covington, Maryland, is capable of loading 66,600 pounds a minute. To take the hard knocks that result from this fast, heavy work, the Du Pont finishes on coal cars and crane installations are formulated to give maximum adhesion and flexibility.

BRISTLING ACTIVITY on Western Maryland's vast merchandise piers in the Port of Baltimore. To protect its huge investment in buildings and equipment at this great Tidewater Terminal—Western Maryland uses Du Pont finishes throughout for long-lasting service and smart looks.

THE PROFS — THE COUNTRY'S MOST INFLUENTIAL PEOPLE

In Chicago recently a group of men of two widely different professions spent an interesting evening together. Railroad men made up part of the gathering. The others were college teachers—academic historians, to be more specific. A common concern brought this assembly, known as the Lexington group, together—their interest in railroad history. Such informal get-togethers a couple of times a year have been going on for about a decade now—pretty conclusive proof that both the railroad men and the historians find stimulation in each other's company. The spark plug of this endeavor is Richard Overton, professor of business history at Northwestern University (and, as an avocation, historian for the Burlington). Another of the active participants is Colonel R. S. Henry, vice-president of the Association of American Railroads—a professional historian in his own right. The railroads' senior statesman, Ralph Budd, is also a hearty collaborator.

A Case in Point

This fraternizing of railroad men and historians has, for the railroads, served the highly useful purpose of getting constructive information about the railroads into the historians' hands. Just to cite one specific instance —the railroad land-grants. Until relatively recently, practically all printed history in this country gave a distorted account of the magnitude and nature of these land-grants—with an interpretation highly harmful to the railroads in their present competitive situation.

In more recent historical writings, that false and damaging report has been corrected—not because the historians have been "sold a bill of goods," but because they have been given access to all the available records of a number of important railroads, and in most of these records they have found a great deal more to praise than to censure, about land-grants and practically everything else. Until they got access to the complete files, about all they had to go on were court records, newspaper reports of hard luck in railroading, and legislative and regulatory proceedings which usually arise only when trouble is afoot. Writing history from public records only—and without access to the complete information available only in the railroads' files—is a good deal like writing a history of public health from the hospitals' and physicians' files, where the records deal entirely with illness. Distorted history is the inevitable result of such partial and one-sided information.

The historians have done better by the railroads as the railroads have, more and more, given them an opportunity to get at the whole truth. Moreover, the history writers and teachers aren't the only academic people who could, and doubtless would, be better friends to the industry if given greater exposure to the facts.

The trouble is that hardly anybody adequately realizes the importance of academic people to the railroads or any other group in the community. The Freeman magazine, which is a pretty severe critic of the economics of the late Lord Keynes, has found and is circulating with enthusiastic agreement one quotation from him. It reads as follows:

"The ideas of economists and political philosophers.

both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back."

Putting the Best Foot Forward

It costs nothing, or next to nothing, to gain and hold the friendly interest of these opinion-creating people—omitting, of course, the hopelessly lunatic minority of them, who are not very influential anyhow. Most of them are intelligent people and cannot be bamboozled into believing that black is white—but, since railroad performance, present and past, is so predominantly honorable and constructive, nothing can be lost and a great deal can be gained by making railroad performance an open book to reputable scholars.

Almost anybody could name a score or more of useful studies—in railroad taxation, comparative regulation, financing, rate-making, industrial development—which capable academic people could do for the railroads, individually or collectively. Studies of this kind could be done by on-line universities as economically as by the railroads themselves, or more so. The railroads would thereby get organized information for practical present-day managerial purposes—and, in addition, the valuable by-product of better understanding of railroad problems and accomplishments on the part of the most powerful opinion-leading sector of the community.

It used to be said derisively that "those who can, do; those who can't, teach." That kind of foolish talk is largely responsible for the fix the country, and the rest of the world, is in today. Teachers mold the future by the way they interpret the present. If people in charge of business enterprises keep aloof from the teachers and effectively prevent them from getting accurate knowledge of how practical affairs are, and have been, actually conducted, whose fault is it when a lot of dangerous and mistaken theories arise in the colleges and are turned loose on the world?

Behind every academic and clerical misleader of public opinion today lie a score or more of nameless business leaders of a decade or more ago, who might have prevented a good head from getting stuffed with so much misinformation. They were much too busy with "practical problems"—as if there were something impractical about taking steps to stay out of the political dog-house.

LITTLE THINGS FOR BETTER CONVENTIONS

A most unfortunate characteristic of many conventions is that they leave a big impression — on the seat of your pants.

Few railroad men who have squirmed through a two- or three-day meeting will choose to quarrel with that statement. The typical hotel chair is a strange device deserving of awe and consideration. It has the peculiar faculty of growing harder (and seemingly smaller) by the hour.

With the big convention season right at hand, the editors of *Railway Age* (inveterate railway convention-goers themselves), presume to offer a few pointers on seemingly "little things" which nevertheless can make or break a meeting.

Styles in hotel chairs promise to be pretty much the same as they have been for decades. The best way to minimize their distracting influence is to "time" convention sessions so that *rigor mortis* doesn't have a chance to set in. Hourly 10-minute breaks — or "seventh inning stretches" — will help enormously. Better yet, time each succeeding break so that the segments of the program become progressively shorter. This for example, the second event might last 50 minutes, the third, 40 minutes, and so on, until the session breaks up for luncheon or dinner. These short breaks will serve to awaken the drowzy, relieve the fundamentally benumbed and afford a period for informal conversation from which important ideas might arise.

How about visual aids? A simple, yet highly effective device is to have small charts, diagrams and tables, as well as pictures, photographed on 35 mm. film for projection on a screen. By giving the membership something to look at while they are listening, the "pace" of the program accelerates. And the members in the back row will get a chance to see the material as well as those in front. Screens and projectors can be rented at a trifling cost from camera stores.

Oxygen is important too. A wise program chairman will delegate a member of his committee to act as "house manager" to see to it that air conditioners are working properly, or that windows are properly controlled. This "house manager" — not the presiding officer — should also oversee things like screens and projection equipment, the operation of lights and curtains within the room, the public address system, the supply of chairs and ash trays and drinking water. Hotel employees will do much of the actual work, but somebody has to make sure that they are apprised of these needs.

There are many more *desiderata*, but attention to the simple concerns mentioned should increase the popularity of conventions immeasurably. We hope so; we like to go to them.

The Western Maryland—which will celebrate its one-hundredth birthday on May 27—has earned the title, "Fast Freight Line," by the speed and the efficiency with which it moves coal and many other kinds of freight over its 836 miles of line through the hills and valleys of Maryland, southern Pennsylvania and northeastern West Virginia.

The WESTERN MARYLAND Joins The "Century Club"

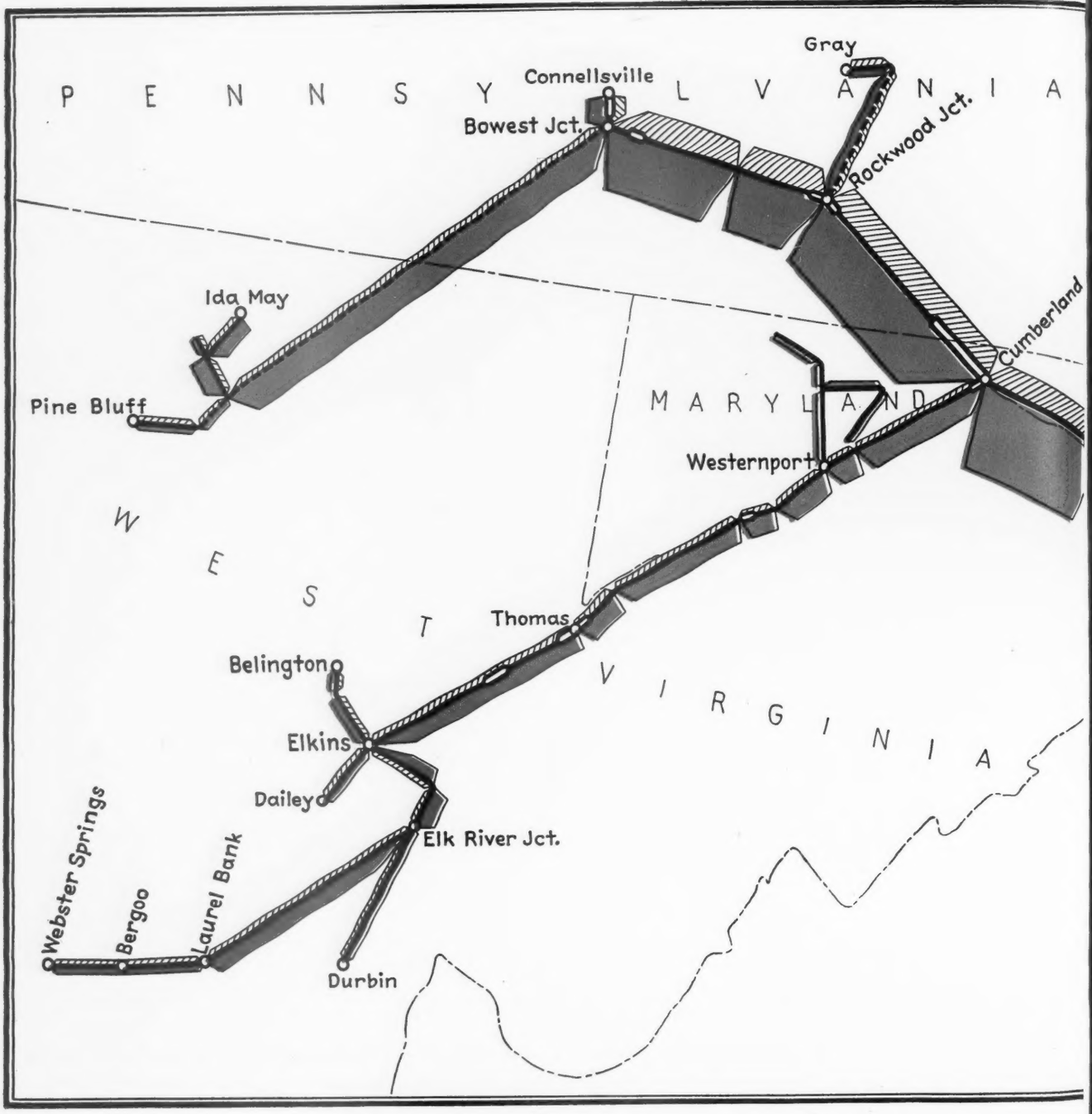
Fast Freight Line is what the Western Maryland—newest addition to the country's rapidly growing list of century-old railroads—calls itself. No title was ever better deserved. For there are few, if any, Class I line-haul common-carrier railroads more wholeheartedly devoted to expeditious movement of freight than that which extends in a sprawling "X" across Maryland, southern Pennsylvania and northeastern West Virginia, and which will be 100 years old on May 27.

Freight is the Western Maryland's lifeblood—its whole reason for being. Freight—some of it moved over some of the stiffest mainline railroad grades in the world, behind powerful and superbly maintained 2-10-0's, 4-8-4's and 4-6-6-4's, or sleek new diesels. Freight—which in 1951 produced 95.08 per cent of the road's gross operating revenues—$45,377,073 out of a record-breaking total of $47,724,914.

Passenger business, by comparison, is almost a dead issue; revenue from it in 1951 was only $115,537, while all passenger-train revenue, including mail, came to only $275,105—just 58/100ths of one per cent of the road's total operating revenues.

The comparative unimportance of passenger traffic is easy enough to understand; aside from the same factors which have affected travel on all railroads, the Western Maryland traverses sparsely populated territory, and reaches only one really large city. Yet, west of Hagerstown, at least, its line is a scenery-seeker's Heaven—a rail fan's paradise. East of the Rockies, there is probably no more spectacular railroad journey than that which begins at Cumberland, winds between massive clumps of pine and rhododendron up to the very headwaters of the Potomac, and then almost literally tumbles tortuously down into Elkins on a line which includes 10 miles of better-than-3-per-cent grade through beautiful Black Water canyon.

Passenger business was not always light. For a few years around 1913 the Western Maryland teamed up with the New York Central (Pittsburgh & Lake Erie and Lake Shore & Michigan Southern) to operate through

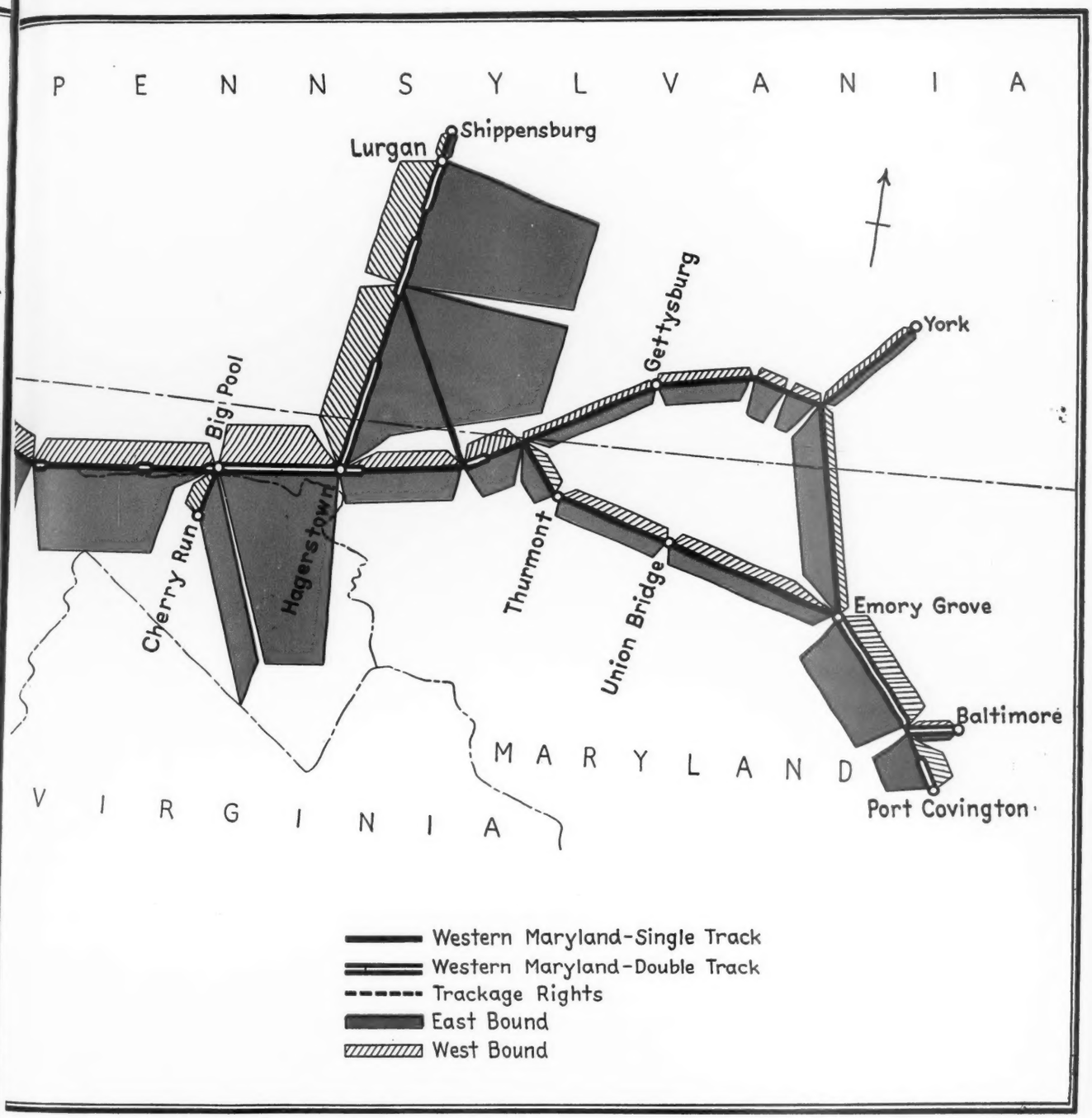


Prevailing direction of traffic throughout the entire Western Maryland system is eastbound. Actual movement of revenue tons per mile of line per year varies from less

trains, competitively timed at less than 24 hours, between Baltimore and Chicago. And until the Blue Mountain House, at Pen-Mar, was destroyed by fire, also in 1913, the Western Maryland's "Blue Mountain Express," and special excursion trains—not infrequently double-headed—carried thousands of vacationing Baltimoreans to the Blue Ridge mountains on summer week-ends.

But today passenger traffic has dwindled to the point where it can all be handled by nine trim Pacifics, and 42 cars—of which 18 are for head-end business exclusively. There are two trains each way every week-day, and one on Sundays, between Baltimore and Hagerstown, plus a daily-except-Sunday "commuter" as far as Union Bridge; one week-day train each way between Hagerstown and Cumberland; one between Cumberland and Elkins; and a daily-except-Sunday mixed turn-around run from there to the Chesapeake & Ohio connection at Durbin. Except on the latter, air-conditioned coaches are operated, equipped with individual reclining seats, and—like everything else on the railroad—superlatively well maintained.

The 139,688 passengers who did patronize the road in 1951 traveled an average of only 28.48 miles each, and



than 100,000 tons on some branches to over 16 million tons per mile between Big Pool and Hagerstown. System average for 1951 was 4,221,384 revenue tons per mile.

paid an average fare of just under 83 cents. The result was a total of 3,978,864 revenue passenger-miles, at an average revenue of 2.9 cents. Except for distance traveled, all figures, as well as total passenger revenue, were slightly higher than in 1950—but not enough higher to indicate any major revival of passenger traffic or to affect the road's financial results to any important degree.

But as the road's slogan says, it is freight which carries the load. Coal, of course, is the big item; it, and coke, produced $17,166,071, or 35.97 per cent of the road's total revenues, in 1951.

Coal is picked up directly from mines along the lines which wind through the rugged West Virginia hills south and west of Elkins; along the Cumberland-Connellsville line; and on those isolated segments of the W.M. which are connected to the main line only by trackage rights over the Baltimore & Ohio. More coal is received, in huge volume, in interchange from the B. & O. at Cherry Run, W. Va. It is delivered, in some part, to Baltimore and to the Western Maryland's tidewater terminal at Port Covington in the Baltimore harbor area. But most of it moves northeast to Lurgan, Pa., where it is delivered to

Diversified tonnage of many types of freight is handled. But coal—and coke—are the Western Maryland's most important commodities. Hauled directly from mines along its own lines, or received in interchange, particularly from the Baltimore & Ohio at Cherry Run, the two accounted for more than one-third of its total revenue in 1951.

the Reading for movement on into Pennsylvania, New Jersey, New York and New England.

Not Only Coal . . .

In no sense, however, is the "Fast Freight Line" exclusively a "coal road." Other commodities, in fact, accounted for nearly three-fifths of all its 1951 revenues —$28,211,001, or 59.11 per cent. Most important were grain, steel and steel products, petroleum products, ores of various types, cement, and general merchandise.

The principal movement of such commodities is from Connellsville, where they are received from the B. & O., the Pennsylvania, the Pittsburgh & Lake Erie and the Pittsburgh & West Virginia, for movement to Lurgan, where they are delivered to the Reading. But there is, in addition, an important movement into Baltimore and Port Covington, via either the main line through Westminster or the secondary but lower-grade line through Hanover.

Westbound movement of import ores and other commodities follows the same routes in the reverse direction, in approximately similar, but considerably smaller, proportions. Throughout the system, as shown by the traffic flow map on pages 54 and 55, the heavier volume of traffic is eastbound.

16 Million Tons per Mile

This volume added up, last year, to a total of almost 29 million revenue tons, carried nearly 122 miles each, for an aggregate of 3,531,145,683 revenue ton-miles, producing average revenue of 1.285 cents. All the figures cited were higher than in 1950.

System average was 4,221,384 tons hauled per mile of line, but this was a composite figure which varied, in detail, from less than 100,000 tons per mile on some of the branches, to over 16 million tons per mile on the double-track section of the main stem between Big Pool and Hagerstown.

Overall, the Western Maryland, in January 1952, ranked eleventh, among the country's 52 largest railroads, in net daily ton-miles of freight handled per mile of line.

To receive and deliver this tonnage, the Western Maryland maintains major interchange facilities with other roads, named above, at Connellsville, Cherry Run and Lurgan, and also at Baltimore and at Hagerstown, where it has a connection with the Norfolk & Western. It has important classification yards at Knobmount, just south of Cumberland, where the Connellsville and Elkins lines come together, and at Hagerstown, where its lines from Baltimore and Lurgan join each other.

Proudest of Port Covington

But the freight handling facility of which the road is justifiably the proudest is its deep-water rail-ocean terminal at Port Covington, in Baltimore. The terminal stands on the site of, and is named for, Fort Covington, which played an important part in repelling the attack on Baltimore during the War of 1812—the attack which led to the writing of the "Star Spangled Banner."

Started with a single pier in 1902, the terminal now provides simultaneous berthing space for 23 ocean-going steamers. Its facilities include a series of merchandise piers and warehouses; a 4,000,000-bushel grain elevator; a 1,400-foot coal pier with two car dumpers; a 1,500-foot ore pier; a 2,000,000-gallon molasses storage tank; and float bridges. The grain elevator, incidentally, brought the railroad nearly $1¼ million in revenue in 1951—almost five times as much as all passenger-train service, and just about two-thirds of all non-transportation operating revenue.

Supporting these numerous facilities are a 2,000-car radio-controlled yard, with 75 miles of track; a round-

Meticulous maintenance of all types of equipment, and particularly of motive power, is a hallmark of the Western Maryland. Without exception—or exaggeration—its locomotives look as though they were not only scrubbed, but waxed and polished, after every run.

house; and car and diesel locomotive repair shops, plus a fleet of 10 railroad owned car floats, largest in the harbor.

Big as the terminal is, the Western Maryland, on its hundredth birthday, is contemplating an expenditure of up to $15 million to make it even bigger, and to improve its own service to shippers. The proposed development would include expansion of the ore pier and of the supporting yards; construction of a new merchandise pier and improvement of all those presently existing; erection of a diesel enginehouse; and expansion of car storage yards.

Trains, Cars and Locomotives

To move its revenue freight, the W.M. operates a fleet of fast symbol trains in both directions between Connellsville (Bowest Junction) on the west and Lurgan and Port Covington on the east. "Moves" is the proper term, for some of these trains are scheduled over the 88 miles from Connellsville to Cumberland in three hours and over the 79 miles from Cumberland to Hagerstown in less than two. There are, in addition, regularly scheduled trains, or daily "extras," between such points as Hagerstown and Cumberland, Cherry Run, Lurgan, York, Union Bridge, and Baltimore; between Baltimore (Port Covington) and Union Bridge, Hagerstown, and Gettysburg; and between Cumberland and Elkins. There are, also, short-mileage locals, and any necessary number of extras, mine runs, and coal drags, on both main lines and branches.

The road's freight-car fleet, as of December 31, 1951, aggregated 13,742 units, with hopper cars—9,615 of them—predominating.

Its locomotive fleet included, in addition to the nine passenger Pacifics, 133 steam and 27 diesel-electric road freight locomotive units, and 40 diesel switchers. The 67 diesels—13 of which were new in 1951—include units from Electro-Motive, American Locomotive-General Electric, and Baldwin-Lima-Hamilton. All freight service east of Hagerstown, and all switching service, is now performed by diesel power; the road's last two steam switchers were retired last year.

Diesels Moving In—But Slowly

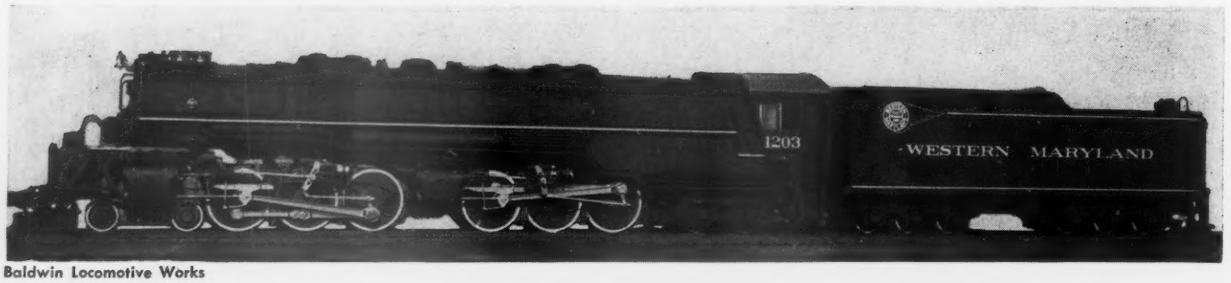
But dieselization, nevertheless, has progressed relatively slowly on the "Fast Freight Line." All road freight service west of Hagerstown, and all passenger service, is still steam hauled.

One obvious reason, of course, is the W.M.'s status as a major coal carrier, and its close proximity to ample supplies of high quality fuel.

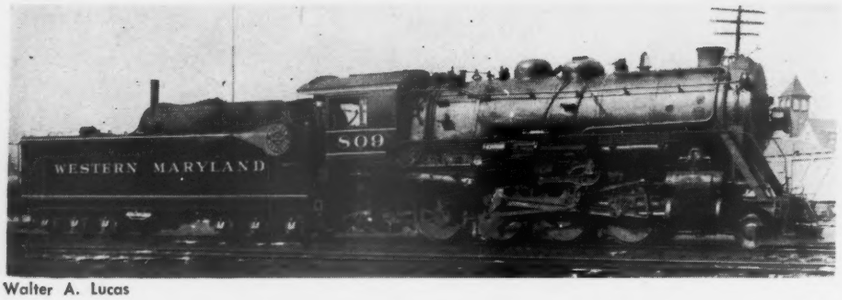
Another, and perhaps even more important reason, less obvious until one rides the Western Maryland, is the quality and power of its steam locomotives—some of the world's heaviest Consolidations, the biggest Decapods ever built, and massive 4-6-6-4 Mallets, some of them capable of developing over 140,000 lb. of starting tractive force. Maintained in enginehouses and shops at Hagerstown, Knobmount, Elkins and elsewhere, with watchmaker's precision and more-than-housewifely cleanliness, they give every evidence of being able to maintain themselves for years to come as one of the last outposts of steam railroading.

Mountain Railroading

Built primarily for power, but with speed not neglected, they enable the W. M. to average better than 40,000 gross ton-miles per train-hour—by no means the highest figure among Class I railroads, but an amazing performance in view of its proportionately large mileage of light-traffic branch lines and especially of the terrific grades which it encounters against loaded movements on the Cumberland-Elkins-Webster Springs lines.

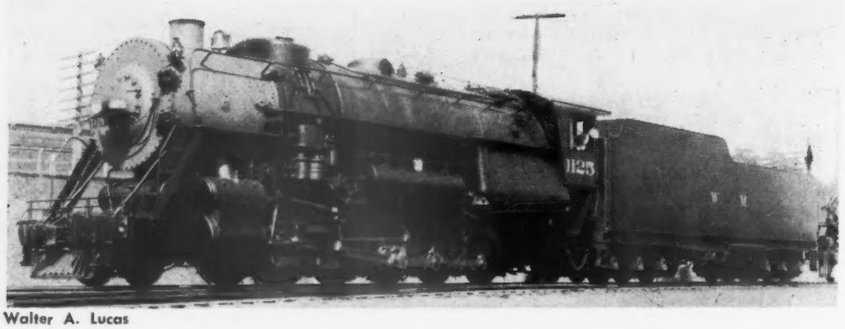


Baldwin Locomotive Works



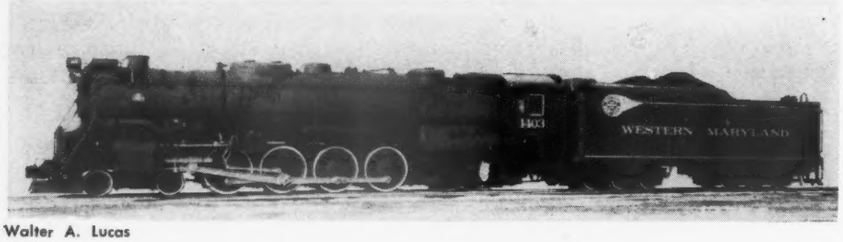
Walter A. Lucas

West of Hagerstown, all Western Maryland road freight service is performed by steam locomotives; the bulk of the work is done by the types pictured here. All of them, incidentally, were built by Baldwin—the Consolidations in 1921; the Decapods—said to be the largest of that type ever constructed—in 1927; the 4-6-6-4 Mallets in 1940; and the 4-8-4's—which the road designates as Potomacs—in 1947. The road's equipment register gives the following details concerning them:



Walter A. Lucas

	2-8-0	2-10-0
Class	H - 9	I - 2
Cylinders, in.	27 x 32	30 x 32
Steam pressure, lb.	220	240
Drivers, diam., in.	61	61
Total weight, lb.	309,910	419,280
Weight on drivers, lb.	287,910	386,800
Tractive force, lb.	71,500	96,300



Walter A. Lucas

	4-6-6-4	4-8-4
Class	M - 2	J - 1
Cylinders, in.	22 x 32	26½ x 32
Steam pressure, lb.	250	255
Drivers, diam., in.	69	69
Total weight, lb.	601,000	506,500
Weight on drivers, lb.	402,266	290,000
Tractive force, lb.	95,500	70,600

It is those same West Virginia mountain grades that provide the Western Maryland with some of its most unique and interesting features—both scenic and operating.

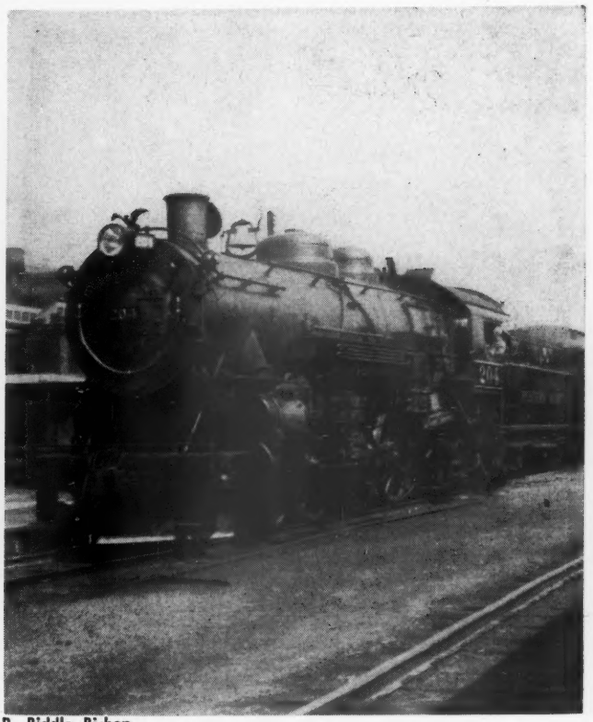
On the Elkins line, from Thomas to Hendricks, there is nearly 10 miles of 3.05 per cent grade, descending westbound. At Thomas, the tracks are level with the headwaters of the Black fork of the Cheat river—so named, Passenger Conductor Bucy, on the line for 48 years, will tell you, "because it has cheated so many men out of their lives" during its raging spring floods. Two miles beyond, and below Thomas, the river is perhaps 1,000 feet below the rails, almost lost in the bottom of a V-shaped pine and rhododendron covered canyon, down whose winding walls even two-car passenger trains creep cautiously, with all retainers up. The grade, it is said, is so steep that if a baseball should be placed in the aisle at one end of a passenger car, gravity alone would cause it to roll out the other end.

At the west end of the Webster Springs line, there is over 45 miles of continuous grade of 1.3 per cent or more, topped off by a steady 12 miles of 2.88 per cent climb from Laurel Bank to Summit. And most of the latter is uncompensated, with almost no tangent, and curves up to 30 degrees. At Summit, incidentally, the road reaches an altitude of 4,017 feet above sea level—the highest point on any standard-gage railroad in the eastern United States.

100 Cars—10 Locomotives

Both taxing grades, unfortunately for the road, are against the prevailing eastbound direction of loaded movement. Getting to their tops, with coal drags from

For a number of excellent reasons, dieselization has not been as rapid or as extensive as on many other railroads. Today, however, all yard switching and all road freight service east of Hagerstown are performed by diesel-electric power.



R. Biddle Bishop

The Western Maryland's few daily passenger trains are all handled by Pacific-type steam locomotives. Service is to be further reduced this month, with elimination of one of the two daily round trips between Cumberland and Elkins.

the various mine branches, has always been a problem.

For many years, in fact, it was considered impossible to operate over the Laurel Bank grade with straight-connected locomotives, and trains were hauled by some of the largest Shay geared locomotives ever built. The road's biggest was a 4-4-4-4, with 46-inch drivers, 17-inch cylinders, 200-lb. steam pressure, total weight of 302,400 lb., and tractive force of 52,200 lb. But the Shays were expensive to operate and to maintain; for some years cost of operation was well over $1 per 1,000 gross ton-miles. Use of the Shays was given up in 1934, and today Western Maryland gets trains over these grades with straight steam locomotives.

But it uses them, when necessary, in the ratio of one locomotive to 10 cars—10 locomotives to a 100-car train!

At Elk River Junction, the Durbin line swings off from the Webster Springs line—to the left. But it goes first to the right, before it cuts back in a complete semi-circle to the left, crossing the Webster Springs line at grade and then continuing on up the side and over the summit of a ridge from which nearly 10 consecutive miles of line are visible in a single view.

All the scenery, though, isn't west of Cumberland. East of it, in the 10 miles between Pearre and Jerome, the W.M. uses a series of eight bridges and five tunnels to cross and recross the Potomac river, the Maryland-West Virginia border, the main line of the Baltimore & Ohio, and the abandoned Chesapeake & Ohio canal. And still further east, between Thurmont and Hagerstown, there's a breathtaking view where the line lifts over the Blue Ridge summit at Pen-Mar and briefly reveals the whole broad sweep of the Cumberland valley.

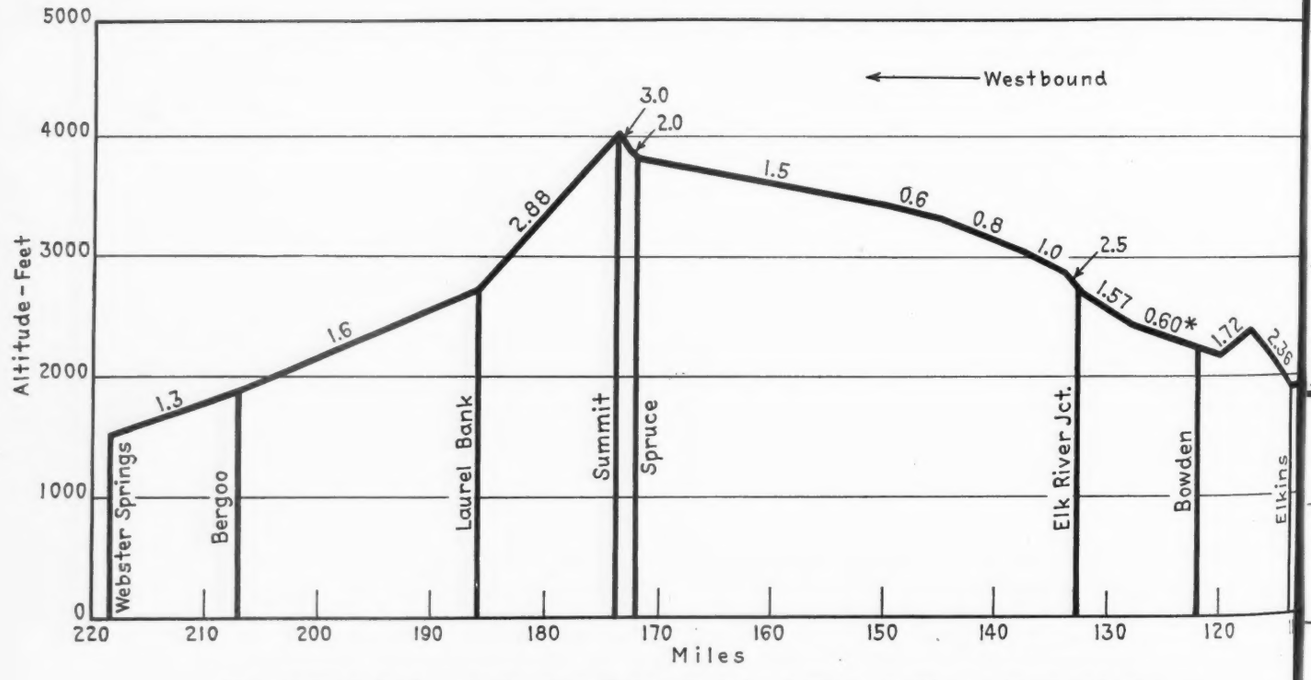
This "mountain to the tide" railroad reaches its one hundredth birthday on May 27. It had its beginnings in Westminster and Carroll county, just west of Baltimore, whose citizens could see railroads being built around them—but not to them. The B. & O., for example, had gone to the south, because its engineers could not find a practicable route over South mountain, which the W.M. now crosses at 1,411 feet. And other railroads were diverting north to Philadelphia the trade of the Cumberland valley, which centered in Hagerstown. Baltimoreans were no less anxious for a rail connection with Westminster, Union Bridge and Hagerstown.

"Committees" were appointed in Carroll county as early as 1847; their original objective was to secure an extension to Westminster of the Baltimore & Susquehanna, which had begun a line north from Baltimore in 1830 and made tentative motions in the direction of Westminster as early as 1832. Nothing, however, came of this project, and so the people of Carroll county put up the money for their own railroad, and had it chartered, on May 27, 1852, as the Baltimore, Carroll & Frederick. Less than a year later, a special act of the Maryland legislature changed the name to Western Maryland Rail Road Company, and authorized it to be built through to Hagerstown.

The first surveys for the new line, begun in 1852, followed the B. & S. tracks out of Baltimore's Calvert station, through Jones Falls to Owings Mills, and thence west toward the Monocacy river. In line with those surveys the new company purchased the Westminster-pointing branch of the B. & S. (later the Northern Central and now the Pennsylvania), but sold it again in 1874, after the Western Maryland built its own line into Baltimore. Its present Baltimore terminal, Hillen station, reached by trackage rights over the P.R.R., was built just a few years later.

The new line was completed to Owings Mills, and

Most important single freight-handling facility maintained by the Western Maryland is the mammoth rail-ocean terminal at Port Covington (Baltimore), Md. It provides simultaneous berthing space for 23 ships; merchandise, coal and ore piers; a grain elevator; a molasses storage tank; cranes and float bridges.

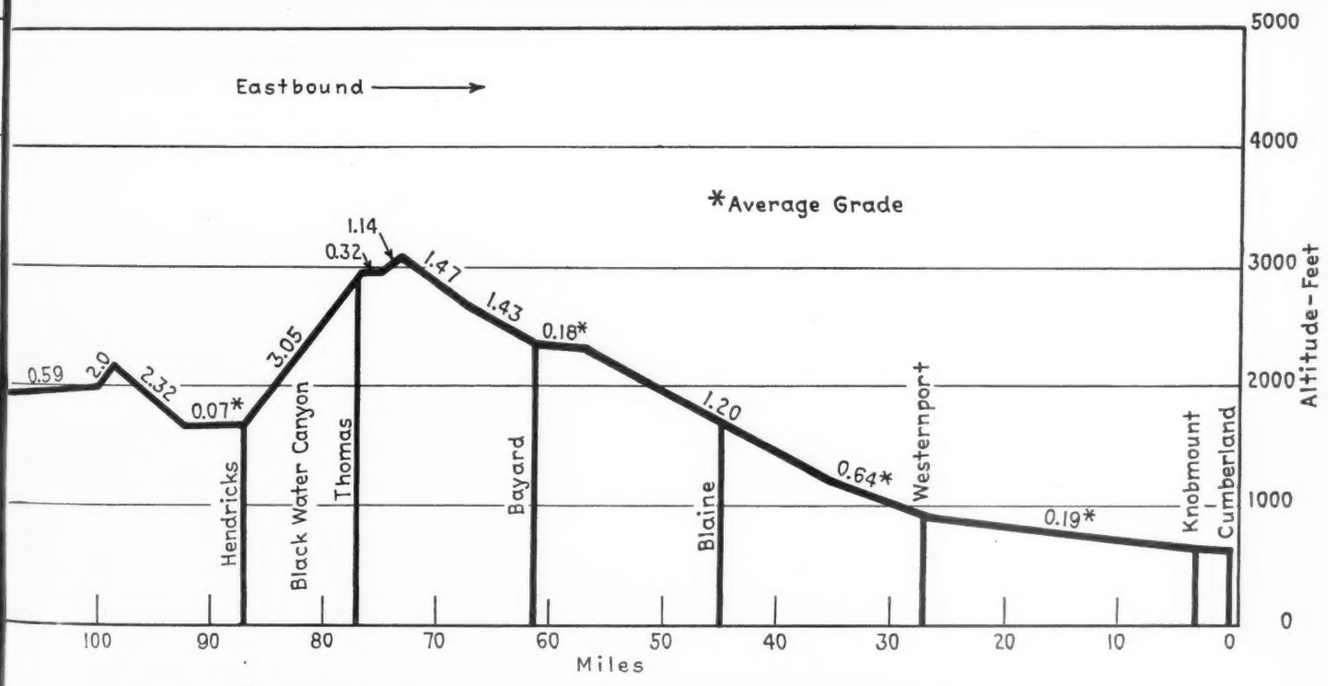


West of Cumberland, on its line from Webster Springs and Elkins, the Western Maryland bucks some of the stiffest grades found on any main-line standard-gage railroad in the United States, particularly from Laurel Bank up to Summit, and from Hendricks up to Thomas, through Black Water canyon. In

service was begun, in 1859, extended to Westminster in 1861, and to Union Bridge in 1862. But by that time the Civil War had intervened, not only to stop further construction, but to give the young railroad plenty of trouble from actual or threatened military action.

Trains had sometimes to be deliberately run off schedule, to avoid capture; while on at least one occasion the road's first locomotive — the little 12-ton "Canary" (also known as the "Green Spring")—was forced into service to carry Confederate volunteers from Baltimore between Owings Mills and the end of the railroad. Prior to and after the battle of Gettysburg the road was used to carry thousands of soldiers and tons of ammunition and military supplies.

The Port Covington terminal is supported by a 2,000-car yard, radio controlled, and necessary car and locomotive servicing and repair facilities. These supporting facilities would benefit from a $15-million program, under consideration, for enlargement of the big waterside terminal.



this condensed profile, average grades have been shown in some places where individual grades were too short, and changes in grade too frequent, to permit showing full details. Figures on the longer grades, however, are taken directly from the road's own profile, as are elevations, distances, and other data.

Repair of rolling stock was a problem, too, which dictated erection of car shops, still in existence, at Union Bridge.

Construction surveys had continued, however. In 1871 the line was pushed westward to Mechanicstown (now Thurmont); and by working west from there and east from Hagerstown the through line was opened on June 6, 1872, just a little more than 20 years after the granting of the original charter. A short extension to Williamsport on the Potomac river and the Chesapeake & Ohio canal was opened the following year.

The year after that (1874) the presidency of the road was taken over by Confederate General John Mifflin Hood. When General Hood assumed office, the road was

in a sorry state. It was in serious financial straits; its 90 miles of track were in poor condition; and its 12 locomotives were "wheezing with age and punishing overwork." When he left, 28 years later, the Western Maryland had nearly 270 miles of good steel track, reaching into the flourishing valleys of Maryland and Pennsylvania, and valuable traffic connections with other roads.

Cherry Run and Pen-Mar

It was Hood, for example, who connected the W. M. with the B. & O. at Cherry Run in 1892. It was he also who backed the development, on the crest of the Blue Ridge mountains, of Pen-Mar Park and of the Blue Mountain House, which, at its peak in 1898, brought the Western Maryland 1,200,000 passengers.

That business was lost when the hotel burned, but the Cherry Run connection, even more important, is still a prolific source of profitable coal and miscellaneous traffic. Only one mile in length from the present main line at Big Pool (and much of that a bridge over the Potomac), it is one of the most heavily used portions of the entire system (see map, page 55).

Meantime, in the fifties, the Hanover Branch Rail Road and the Gettysburg Railroad had been built in southeastern Pennsylvania, and in 1886 their operation was taken over by the Western Maryland. It was over the Gettysburg, incidentally, that President Lincoln traveled on the occasion of his Gettysburg address in November 1863; it may well have been on one of its cars that the famous speech was actually written.

The Western Maryland reached Lurgan-Shippensburg and its Reading connection from Hagerstown via Waynesboro in 1886, by leasing the Baltimore & Cumberland Valley. Today, however, another and much shorter leased line, built by the Washington & Franklin in 1901, is much more intensively used.

The Gould Dream

On its 50th birthday, then, the Western Maryland, east of Big Pool and Cherry Run, was substantially complete, just as it stands today, save for the branch from the main line to tidewater at Port Covington, which was not built until 1904. Subsequent development of its western end resulted, at least indirectly, from the purchase of the city of Baltimore's interest in the railroad by a group acting for George Gould.

Mr. Gould, it appears, visioned the W. M. as the eastern end of a proposed transcontinental railroad system, based on the Wabash. His idea seems to have been to control the Wheeling & Lake Erie (which connected with the Wabash), and to extend that into Pittsburgh over a new line—eventually built and now the Pittsburgh & West Virginia. There would still have been no direct connection with the W.M., but as a roundabout step in that direction, Gould purchased from the Davis and Elkins families in 1905 their West Virginia Central & Pittsburgh, built in the eighties from Elkins to Cumberland. He then set out to tie this line to the W.M., by extending the latter west from Big Pool to Cumberland.

But Gould, unable to overcome opposition from the Pennsylvania and the New York Central, could not carry out his grandiose scheme. And the $13-million cost of the 60-mile Cumberland extension, with its eight bridges across the Potomac and the B. & O., and its five tunnels under Appalachian ridges, threw the Western Maryland into bankruptcy, on March 5, 1908.

It was reorganized as the Western Maryland Railway on December 31, 1909, no longer with any idea of being the eastern end of a transcontinental route, but with the far sounder plan of a new northwesterly extension to a Connellsville connection with the Pittsburgh & Lake Erie. Work on this 88-mile extension, with its four tunnels and a maximum elevation of 2,374 feet, was begun in 1910, and completed August 1, 1912.

With that extension, the Western Maryland largely reached its present form—except for two of its most interesting portions—the Greenbrier, Cheat & Elk, from Elkins to Webster Springs, and the Coal & Iron, from Elk River Junction to Durbin. The Cumberland & Pennsylvania was purchased from the Consolidated Coal Company in 1944.

Western Maryland Today

The result of this century of development, absorption, consolidation and lease is a present-day system of 836.49 miles of line, owned, leased or operated under trackage rights. Better than half of this is heavy-duty track, stone or slag ballasted, and laid with rail weighing from 112 to 132 lb. per yard; for the system as a whole average weight of rail was increased from 91.55 lb. to 107.17 lb. in the 11 years from 1940 through 1951.

Track, rolling stock and other facilities, as of December 31, 1951, represented a net depreciated investment of just over $171 million.

Capitalization

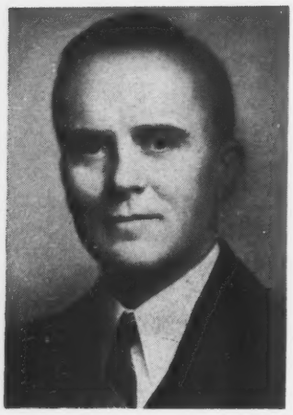
Outstanding capital stock is $77,167,018.80; approximately two-thirds of this is common, and the balance is divided between two issues of preferred—a 7 per cent cumulative issue of $17,742,000, and a 4 per cent noncumulative convertible issue of $6,138,200. The largest individual holder of the stock is the Baltimore & Ohio, but its holdings are held by the Chase National Bank of New York and are voted by Chase as trustee.

Long-term debt—excluding a few thousand dollars in bonds of the leased Washington & Franklin—consists of just under $15 million in seven series of equipment trust certificates and one conditional sales agreement; and two issues of general mortgage bonds aggregating $44,481,000. There are, in addition, a little less than $10 million of first mortgage bonds, but these are due for retirement on or before October 1 of this year, with funds already on deposit as a result of the sale of the general mortgage bonds. The latter are in two series. Series A, issued in 1949, in the amount of $29,531,000, matures in 1969. It bears interest at 4½ per cent to October 1 of this year, and at 4 per cent thereafter to maturity. Series B, totaling $14,950,000, at 4½ per cent, was issued in 1951 and matures in 1976.

Except, therefore, for its remaining first mortgage bonds, retirement of which is already provided for, the road has no immediate debt maturities. Equipment trust and conditional sales obligation maturities, this year, will aggregate—barring issuance of new certificates—

A. Aubrey Bodine Photo

The Black Water canyon of the Cheat River (facing page) provides some of the finest scenery—and some of the toughest railroading—to be found anywhere. The Western Maryland's Cumberland-Elkins line climbs the canyon, between Hendricks and Thomas, on 10 steady miles of winding 3.05 per cent grade—all of it against the heavy eastbound volume of traffic, which is predominantly coal.



Fabian Bachrach

Eugene S. Williams, chairman of the board, entered the Western Maryland's law department in 1923. He was vice-president and general counsel from 1935 to 1947; and president and chairman of the board from January 1, 1948, to May 1 of this year, when he retired from the presidency.

Fabian Bachrach

G. R. Haworth, vice-president and general manager, has been in railroad service since 1905. He joined the W. M. as an instrumentman in 1911, and, except for one brief period, has been with it ever since. He became general manager in August 1941 and vice-president in March 1943.

Fabian Bachrach

C. R. Zarfoss, vice-president, traffic, was born in York county, Pa., in 1907, and has spent his entire railroad career with the Western Maryland. Beginning as a clerk in the transportation department on May 1, 1926, he became traffic vice-president 19 years later, in May 1945.

just over $2.2 million, which exceeds by about $300,000 total 1951 equipment depreciation charges of approximately $1.9 million. This year, however, will see final discharge of the Series L equipment trusts, which mature at the rate of $600,000 annually. Thereafter, again barring issuance of new obligations, payments will be well under annual equipment depreciation charges.

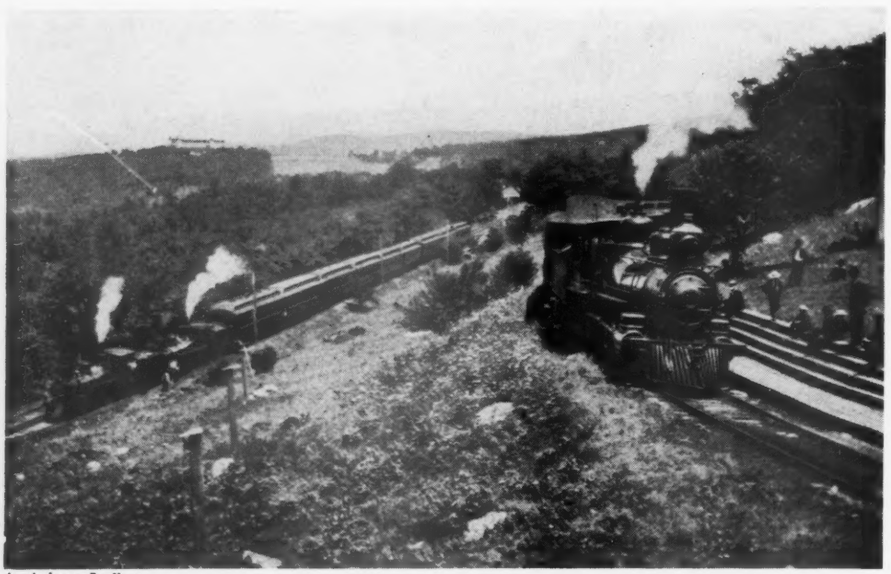
Interest payments appear to offer no problem, at least under present conditions. Total fixed charges, including both interest on debt and rent for leased roads and for that part of the Port Covington terminal owned by the city of Baltimore, are well under $3 million; while income available for payment of such charges substantially exceeded $8 million in both 1950 and 1951.

The only important cloud on the railroad's financial horizon is the dividend accumulations on its first preferred stock. Payment of $14 per share on this stock in 1951 reduced these arrearages from $136.50 to $129.50 per share. But the road has so far been unable to work out any plan of capital readjustment which will solve this problem; a proposed readjustment submitted to the Interstate Commerce Commission in 1950 was withdrawn in 1951 because of "a lack of assurance that holders of at least 75 per cent of each of the three classes of outstanding stock would approve the plan or any modification thereof."

Operating revenues, however, are at record high levels. The 1951 operating ratio of 70.38 was substantially under the countrywide ratio of 77.4 and still farther below the Eastern district ratio of 81.4—which indicates that expenses are being kept under as strict control as any railroad can hope to keep them in these days of cumulative wage increases and inflationary prices.

As a result, net railway operating income, at $8,271,033, topped all previous years except 1948, and nearly equaled that.

Given a few more years of such traffic—and some surcease from constantly rising costs—the road can undoubtedly work out its own financial problem — which is, after all, no more formidable than the mountain grades it so regularly surmounts in earning and maintaining its well-earned name—"Fast Freight Line."



A. Aubrey Bodine

Prior to 1913, when the Blue Mountain House (just visible on the horizon at the left) was destroyed by fire, Pen-Mar Park in the Blue Ridge Mountains was a popular week-end, vacation and summer resort for the citizens of Baltimore—and a source of lucrative passenger traffic for the Western Maryland.

L.c.l. is rapidly becoming a "traffic orphan" on many railroads simply because rapidly mounting handling costs have compelled large rate increases which have driven traffic away.

A Four-Point Plan for Improving the Handling of L.C.L.

The Traffic Orphan

Written especially for *Railway Age*
By HARRY H. POTTS

Harry H. Potts

It is possible that the railroads could retrieve much of the high-revenue l.c.l. freight now largely lost by adopting new service and handling methods. Yet these new methods need not be revolutionary.

Essentially, the problem facing the railroads is one of reducing costs and improving service performance. The shipper, on his part, seeks better service and a more equitable scheme of rates.

Potential Savings

These ends might be accomplished by means of a "Four-Point Plan"—an arrangement which could expedite service; and save millions of dollars in interline cartage and trap car costs, direct freighthouse and transfer operations, terminal switching, loss and damage payments and in local freighthouse and accounting department expenses.

This plan is not new—it is based on elements which

The ideas and opinions expressed in this article are those of the author, based on some 25 years of actual railroad experience and 10 years in working with railroad l.c.l. both as a shipper and as a railroad employee. A booklet explaining this plan in further detail is available from J. S. Gallagher, associate editor, *Railway Age*, 79 W. Monroe street, Chicago 3.—Editor

Point IV in the plan proposes that the railroads discard all existing documents and paperwork, and let the freight travel on its marks—much as do parcel post and express shipments.

have had consideration at one time or another. Its freshness lies in its interrelation of four basic elements—all of which are essential.

The Four-Point Plan

POINT I—*Routing Schedule.*

(a) Undertake a survey to determine present volume, routes, and individual roads' revenue from present l.c.l. traffic moving between all points in United States.

(b) Establish single, positive routes between all major origin and destination points via which all l.c.l. freight will move. Divide these routes among individual railroads so as to preserve the average gross earnings in each line.

POINT II—*Classifications, Rates, Divisions.*

(a) Abrogate all existing classifications and rates.

(b) Provide approximately four classifications into which all commodities will fall.

(c) Establish fair and reasonable zone rates (similar to those of the Railway Express Agency and the U.S. Post Office) for each classification, applicable to all movements.

(d) Establish appropriate divisions for all interline traffic.

POINT III—*Prepayment of Freight Charges.*

(a) Provide for prepayment of *all* freight charges on l.c.l. traffic.

(b) Provide liberal credit regulations for all consignors.

POINT IV—*Accounting, Operating Documents, Freight Claims*

(a) Abrogate all existing documents, practices and procedures relating to l.c.l. office detail.

(b) Devise and establish a multiple-copy coupon waybill which will provide each participating carrier with a coupon representing its proportion of revenue.

(c) Settle interline revenue accounts monthly on the basis of coupons issued and held.

(d) Effect delivery of l.c.l. at destination station from one or more whole copies of coupon waybill provided by originating station, and which accompany freight to destination.

(e) Settle unlocated loss and damage claims on revenue division as reflected by coupon waybills.

It is my firm belief that the institution of such a program will enable the railroads to reduce the number of car-days consumed in carrying l.c.l., and so simplify billing, accounting and handling expenses that the overall service can be operated at a profit. It is intended that the proposed new rate structure will make possible lower rates—particularly on larger volume shipments from the same consignor to the same consignee, and on traffic moving longer distances—thereby adding to the attractiveness of the service to the shipper.

L.c.l. is rapidly becoming a "traffic orphan" on many railroads simply because rapidly mounting handling costs have made necessary large rate increases which have driven traffic away. Shrinking volume has inevitably produced poorer service. Today the railroads are left with the "cats and dogs"—miscellaneous small shipments which no one else wants and which have no other way to move.

The "Four-Point Plan" is designed to reverse this trend by replacing the present obsolete and expensive method of handling and moving l.c.l. with a simple, low-cost system. Although millions have been spent in improving and mechanizing terminals, and in instituting substituted highway motor service, these developments, worthy as they are, cannot themselves accomplish the objectives essential to regaining lost traffic, and to improving the handling of existing traffic.

To set up the pooling arrangements envisaged in Point I, it would be necessary for the carriers to employ a group of statisticians and analysts, for perhaps a year, to conduct a comprehensive survey of nationwide l.c.l. traffic operations. This group would determine the volume of tonnage now moving, routes by which it moves, how long it takes to get to destination, and what actual gross revenues each line receives. Working from this information a schedule would be established of logical routes over which, and only via which, l.c.l. traffic could move, on the basis of preservation of average gross l.c.l revenue for each individual road. Thus, if a line's present l.c.l. revenue were $10 million a year, roughly that amount would be guaranteed it, providing gross traffic did not fall off. Any increases would be shared proportionately.

L.c.l. traffic volume fluctuates as business conditions change. A bureau, perhaps under the direction of the Association of American Railroads, should be maintained to make amendments and revisions in the national routing schedule.

Shippers have indicated a general willingness to subordinate routing preferences in the interest of better service. Standardized routing is actually a universal pooling of traffic designed to assemble at one time and place all of the freight then available for any given destination and the immediate local area served through that destination. This makes it possible to move a high

percentage of all shipments between principal areas in through cars, thereby lessening delays and rehandling expenses at transfers.

Classification and Rates

At recent annual meetings freight agents have complained about "hairsplitting" classifications and the miserable tariff situation. It is my thought that all commodities subject to l.c.l. movement should be broken down into four general classifications. Obviously, this will enlarge the range of commodities within any one class and have the effect of spreading rate applications. Since this plan contemplates some rate reductions, some of these can be achieved through a general reclassification. At the same time the carriers should publish zone rates for each classification, based upon the principle used in Railway Express and parcel post tariffs, for all intrazone and interzone traffic movements.

Interline divisions of zone rates, by classifications, for all designated routes would be agreed upon by individual carriers in the usual manner.

Point III proposes that charges on all l.c.l. shipments be prepaid. A large proportion of l.c.l. traffic now moves prepaid, and the percentage is increasing. Nearly all shippers of l.c.l. freight can qualify for credit. With some liberalization of credit regulations, little or no difficulty should be anticipated.

The prepayment of freight charges has been advocated for years. With a classification and rate structure that can be interpreted accurately, shippers can quickly and easily ascertain proper transportation charges and add them to invoices for all goods sold f.o.b. shipping point.

If shippers are permitted to group their settlements in, say, weekly or semimonthly periods, through revised credit regulation, it is probable that slight objections to this requirement would be advanced.

Point IV in this plan proposes that the railroads discard all existing documents and paper work—including the present waybill—and let the freight travel on its marks—much as do parcel post and express shipments. Under this plan, all present paper work would be replaced by a multiple-copy coupon waybill. Copies would be disposed of as follows:

Original—Retained as issuing station record, with one coupon detached and mailed by issuing station to auditor freight traffic of each participating road, including originatng road.

Copies 2 and 3—One copy used by originating station for collection of prepaid freight charges; one copy retained in cashier's office.

Copy 4—Mailed to auditor freight traffic of originating railroad.

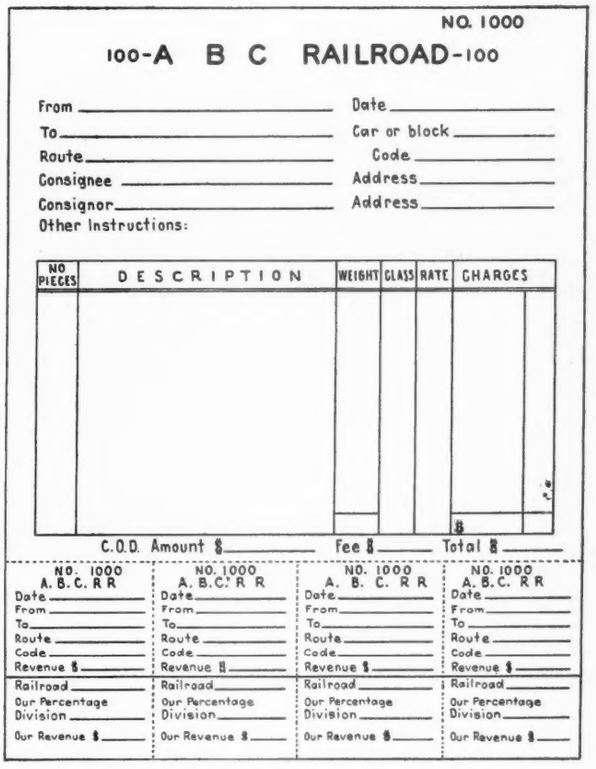
Copies 5 and 6—Forwarded with freight or by mail to destination station, for use as delivery receipt, exception and station record; and for delivery document to consignee.

Copy 7—Forwarded to auditor freight traffic of destination railroad.

If additional copies are found necessary, it is assumed that the grade of paper and equipment used could permit making ten legible copies.

Auditors of freight traffic would use coupons received from all issuing stations for settlement of interline revenue, following settlement procedures similar to those used for interline passenger tickets—i.e., the originating road does the settling. The coupons on the original copy of the waybill are furnished traffic auditors of all roads involved. Auditors of both originating and destination lines receive a whole copy of the waybill.

Some dissenters may argue that this proposal is weak in not providing some check for auditors of intermediate carriers, but intermediate carrier checking is not now widely practiced.



NO. 1000

100-A B C RAILROAD-100

From _____ Date _____
To _____ Car or block _____
Route _____ Code _____
Consignee _____ Address _____
Consignor _____ Address _____
Other Instructions:

NO. PIECES	DESCRIPTION	WEIGHT	CLASS	RATE	CHARGES

C.O.D. Amount $_____ Fee $_____ Total $_____

NO. 1000 A. B. C. R R	NO. 1000 A. B. C. R R	NO. 1000 A. B. C. R R	NO. 1000 A. B. C. R R
Date _____	Date _____	Date _____	Date _____
From _____	From _____	From _____	From _____
To _____	To _____	To _____	To _____
Route _____	Route _____	Route _____	Route _____
Code _____	Code _____	Code _____	Code _____
Revenue $_____	Revenue $_____	Revenue $_____	Revenue $_____
Railroad _____	Railroad _____	Railroad _____	Railroad _____
Our Percentage Division _____	Our Percentage Division _____	Our Percentage Division _____	Our Percentage Division _____
Our Revenue $_____	Our Revenue $_____	Our Revenue $_____	Our Revenue $_____

An artist's conception of the coupon-type waybill which would be an important factor in reducing paper work in connection with l.c.l. shipments.

Since destination stations are provided with whole copies of coupon waybills, these copies provide documents on which to take consignee's receipt, record exception and maintenance station records.

Some people may throw up their hands at the idea of doing away with much of document-making. However, parcel post and express shipments travel on their marks and do a better job of reaching destination than does l.c.l., with all of its waybills, manifests, junction passing records, etc.

The foregoing four points create established traffic routes providing opportunities to operate through cars on carload schedules with a minimum of intermediate delays, rehandlings and interchanges. A simple classification and rate structure is provided which may be interpreted quickly. Revenues are collected at point of origin—through liberalized credit arrangements—making possible much simplification in paper clerical work.

Such a procedure should require practically no change in our present system of prorating freight claims on a mileage basis.

Some very commendable progress has been made, on some roads, in establishing through or overhead merchandise cars to move via two or more lines. In principle, and as far as it goes, that is exactly what the "Four-Point Plan" suggests. But the lack of universal routing limits the possibilities of this achievement so greatly that the development of simple overhead car routes can never adequately improve overall service and effect economics.

Less-carload freight yields the highest gross revenue per ton of all traffic. If old methods are failing, perhaps new ones should be considered. It may not be too late to find ways and means for preventing the surrender of this traffic and revenue.

Diesel freight on the main line of the Rio Grande in South Canyon west of Glenwood Springs, Colo.

D. & R. G. W. Capitalizes on Modern Diesel Motive Power

An effective inspection and maintenance schedule, plus controlled lubrication and good operating-mechanical teamwork contribute to 67 per cent operating ratio

The Denver & Rio Grande Western had an operating ratio of 67 per cent in 1951, four points less than in 1950. No small part of the credit for this notable achievement is due to the successful introduction and use of diesel-electric locomotives on the railroad in the past ten years. As of January 1, 1952, the diesel locomotive inventory included 40 switchers, 9 road-switchers, 30 four-unit and 2 three-unit road locomotives, a total of 81 locomotives, or 175 units. A number of units are equipped with steam generators and used in passenger service when necessary. Thirty-six new Electro-Motive diesel units are expected to be delivered by the middle of the year.

Operation in the mountainous country traversed by this railroad—with main-line elevations up to 10,221 ft. at Tennessee Pass, maximum grades of 2, 2½ and 3 per cent, tunnels galore culminating in Moffat, and multitudinous curves up to 12 deg.—presents difficulties and costs in no way comparable with those of roads in more level terrain. One of the principal contributions of the diesel locomotive has been its ability to handle increased tonnage from one end of the line to the other with minimum helper service and without stops at 15-mile intervals for wheel-cooling on down grades such as were required before the advent of dynamic brakes.

As a matter of fact, the diesels now take safely down hill at reasonable speeds at least as much tonnage as they can haul up. Freight trains delivered to the D. & R. G. W., possibly by three-unit diesels, are handled over the system by four-unit locomotives with one or more helpers cut in usually at only two points, eastbound or westbound, namely, grades to Soldier Summit in Utah, and either Tennessee Pass or Moffat Tunnel, Colorado.

Helper service is supplied by 1,500-hp. road switchers and three- or four-unit diesels, as required by train length and grade, and by some steam locomotives. As many as six or seven diesel units are often double-headed in pulling trains up hill, but when more power is required, one four-unit locomotive is operated at the head end, another is cut in about 25 cars back and, if the tonnage or severity of the grade make it necessary, still another, or a steam locomotive, may be cut in just ahead of the caboose.

Improvements in diesel locomotive engine and electrical equipment, plus the application of radiator water spray systems for engine cooling in tunnel operation, permit handling more tonnage and at lower speeds on grades than was formerly practicable. At one time, one four-unit diesel would move 1,800 tons westbound out

Diesel freight at Tabernash, Colo., ten miles west of the Moffat tunnel.

of Denver up the two-per cent grades to the Moffat Tunnel, but this train load has now been stepped up to 3,400 tons and the minimum continuous safe speed on grades without traction motor overheating has been decreased from 14 m.p.h. to 10.5 m.p.h. Westbound trains out of Pueblo are operated up to 4,800 tons.

Eastbound via Denver, 5,000-ton trains are handled over the road with helper service for a total of only 38 out of 570 miles. On one day recently, an average of 112 cars were handled per train on the Salt Lake division, and the average for the system in both directions was 84 cars. During February the average train load for the system was 3,199 tons and the gross ton-miles per train-hour 51,785, a continued improvement over exceptionally favorable operating results in 1951.

Record Operating Results

As shown by a table in its annual report the D. & R.G.W. made the greatest improvement in freight-train performance during 1951 of any year in its history. Whereas freight train-miles decreased 14.0 per cent from the 1941 figure, gross ton-miles increased to over 12 billion, reflecting a 43.3 per cent increase in volume of business handled. Net ton-miles followed a similar pattern. The average gross train load increased 66.6 per cent over 1941 to 2,976 tons in 1951, and this in spite of a slight stepping up of average train speeds to 17.1 m.p.h. The result was an increase in gross ton-miles per train-hour from 29,542 in 1941 to 50,847 in 1951, or 72.1 per cent—an accomplishment largely attributable to diesel power, which hauled 83.0 per cent of the tonnage last year.

Tables showing diesel performance in road-freight and helper service, also shopping time and terminal delays for the fairly typical weekly period ended at 11.59 p.m., February 24, further confirm the effective use being made of diesel power on this road. With an average of 26.1 four-unit freight diesels in service, the ratio of hours available for operation to total hours in the period was 90.3 per cent and the ratio of hours actually used

Diesel switcher in the Salt Lake Valley near Salt Lake City.

to total hours was 83.9 per cent. Even including units held out of service for one reason or another these percentages dropped to only 84.4 and 78.4 respectively.

The D. & R.G.W. management tries not to fool itself with misleading statistics, hence the insistence on including in utilization figures freight units held out of service for repairs or other reasons. Accurate records are kept of total hours locomotives are not available for service and unit miles lost. In the period mentioned locomotive miles totaled 60,099, giving an average per day of 8,585 and average per locomotive per day of 329. Freight locomotives worked the equivalent of 50 days in local and helper service during this period and made 9,454 miles, all included in the total mileage mentioned. Deducting these leaves an average of 18.9 locomotives, 383 miles a day in through-freight service.

A tabulation of terminal delays in the week ended

February 24 shows delays due to mechanical work varying from 1 hr. 11 min. to 5 hr. 23 min. at four major terminals, and transportation delays at these four points ranging from 35 min. to 2 hr. 22 min. Needless to say this table is watched carefully by supervisors in both departments as well as top railway management.

The fourth table covering GP (general-purpose) diesel locomotive performance in helper and local freight service during the week ended February 24, also discloses the highly creditable figures of 88.5 per cent availability and 85.9 per cent utilization of two locomotives in helper and switching service and 91 per cent availability and 71.0 per cent utilization of seven locomotives in local freight service. The last two figures of 97.1 per cent and 78.0 per cent in the table reflect the success or difficulty of the operating department in using all of the locomotive service hours placed at its disposal by the mechanical department. D. & R.G.W. experience indicates that it is possible to get only about one-half as many miles per week or month with helper locomotives as with those used in through-freight service. This is approximately true with GP locomotives hauling local freight.

Business Volume Vital Factor

The close interdependence of operating efficiency figures and tonnage available for movement is again demonstrated by D. & R.G.W. records. In the week ended August 20, 1951, for example, only 1,120 unit miles were lost and the miles per locomotive per day in through-freight service averaged 397. In explanation: "This performance, far above any previous record, was brought about by having business available at all terminals with very little delay awaiting traffic to move." Conversely, a less favorable showing in the more recent week ended March 17 elicited the following statement: "Performance was adversely affected by a sudden drop in through business during the week, making it necessary to divert diesels to more locals, drag trains and helper service."

As previously suggested, the kind of country a railroad operates over has an important influence on operating costs and performance, and the D. & R.G.W. is no exception to this rule. Consequently any comparison with less mountainous roads, based on 1,000 gross ton-miles of freight traffic handled, fails to take into account the fact that this heavy tonnage of load and equipment has to be moved around many sharp curves and lifted over one or more mountain ranges.

This statement is borne out by operating comparison reports which show D. & R.G.W. performance to be below average in gross tons hauled per unit and in practically all items of cost per 1,000 gross ton-miles, but definitely above average in locomotive utilization and almost all costs per unit mile, or per gallon of fuel consumed.

For example, in the third quarter of 1951, the gross tons per unit on the D. & R.G.W. were little more than three-quarters of the general average; the cost of repairs, fuel and lubricants per 1,000 g.t.m. was 35.52 cents compared with 28.50 cents average for all roads.

Effective Maintenance Schedule

On a unit-mile basis, for the same period, however, the cost of repairs, fuel and lubricants was only 28.31 cents for the D. & R.G.W. compared with a national average of 32.75 cents. The consumption of fuel per unit mile on the D. & R.G.W. was 1.84 gal. compared with an average of 1.93 gal.; and lubricating oil, .018 gal. compared with .019 gal.

Without an effective diesel locomotive inspection and maintenance schedule, the motive power results described could not have been achieved. The program for this work follows closely recommendations in Electro-Motive Division pamphlet No. 1704, Revision L, and both operating and mechanical forces work together not only in using the locomotives intensively but making periodic inspections and repairs essential for this modern motive power to meet the exacting demands made upon it.

Spectrograph Used

The principal departure from general practice in D. & R.G.W. diesel maintenance methods is the use of a spectrograph in the central laboratory at Denver to analyze crankcase oil and disclose mechanical conditions which need correction and, in fact, tell when oil changes are necessary. Drain periods have been extended to

TABLE 1.—D. & R.G.W. SYSTEM FREIGHT TRAIN PERFORMANCE

	1951	1950	1948	1941*
Freight train-miles	4,037,986	4,067,534	4,739,257	4,696,283
Gross ton-miles produced (000)	12,015,591	10,355,365	10,841,180	8,387,748
Net ton-miles produced (000)	5,782,825	5,066,955	5,387,026	3,585,858
Average train speed, m.p.h.	17.1	17.0	16.5	16.5
Average gross train load, tons	2,976	2,546	2,288	1,786
Gross ton-miles per train-hour	50,847	43,276	37,848	29,542

* Includes the former Denver & Salt Lake Railway

TABLE 2.—PERFORMANCE OF DIESELS IN FREIGHT SERVICE, WEEK ENDED FEBRUARY 24, 1952

	Excluding units held	Including units held
Average number of locomotives in service	26.1	27.9
Potential hours	4,380	4,686
Mechanical time held, hr.-min.	423-5	729-5
Time available, hr.-min.	3,956-55	3,956-55
Per cent available	90.3	84.4
Time available not used, hr.-min.	283-30	283-30
Time used, hr.-min.	3,673-25	3,673-25
Per cent utilization	83.9	78.4
Per cent used of hours available	92.8	92.8
Unit time out of service, hr.	648	—
Unit miles lost	8,885	—
Total locomotive-miles	60,099	—
Average miles per day	8,585	—
Average miles per day per locomotive	329	—

TABLE 3.—DIESEL LOCOMOTIVE DETENTION AT TERMINALS, WEEK ENDED FEBRUARY 24, 1952

Terminal	Locomotives	Mech. Delay Hr.-Min.	Trans. Delay Hr.-Min.	Average per locomotive Mech. Hr.-Min.	Trans. Hr.-Min.
Burnham	48	258-15	113-35	5-23	2-22
Pueblo	35	41-20	78-20	1-11	2-14
Grand Jct.	39	78-25	69-15	2-01	1-47
Salt Lake	38	45-05	22-20	1-11	0-35

TABLE 4.—UTILIZATION OF GP (GENERAL-PURPOSE) DIESELS, WEEK ENDED FEBRUARY 24, 1952

	Roper-Helper, Utah	Burnham-Phippsburg Colo.
Locomotives in service	2	7
Potential hours	336	1,176
Mechanical time held, hr.-min.	38-45	105-45
Time available, hr.-min.	297-15	1,070-15
Per cent available	88.5	91.0
Time available not used, hr.-min.	8-30	235-50
Time used, hr.-min.	288-45	834-25
Per cent utilization	85.9	71.0
Per cent used of hours available	97.1	78.0

300,000 and 400,000 miles or more with no apparent ill effects and, in fact, more reliable service, reduced maintenance and large savings in lubrication costs.

The D. & R.G.W. has pioneered not only in use of the spectrograph which gives a qualitative and quantitative analysis of lubricating oils, but has only recently installed at the Denver laboratory the first railroad-owned electron-microscope for research in (1) improved and less costly diesel locomotive fuels and dispersants, (2) lubricating-oil types and additives which last longer and permit less engine wear, and (3) acceptance testing of both fuel and lubricating oils on delivery (*Railway Age*, April 28, page 46).

Maintenance Calendar Used

The diesel control board or maintenance calendar (illustrated) is the basic device used in telling when diesel locomotives are due for inspection and repairs. In the D. & R.G.W. locomotive numbering system, the first three digits generally give the locomotive number and the fourth digit the unit number. Removable colored thumb tacks are inserted in the master board to show the dates when individual locomotives and units are due for various types of federal inspection such as monthly, quarterly, semi-annual and annual. In addition, there is a form DM-1 showing work to be done in short point-checks of through engines, a slightly longer DM-2 daily or point check, DM-3 weekly inspection work order and DM-4 intermediate or semimonthly work order. The DM-1 form is illustrated.

Red thumb tacks on the control board indicate federal inspection dates and call for locomotives to be tied up at the assigned terminal before 6:00 a.m. of the date due. Green tacks indicate semimonthly inspections and the work may be done on the date due or one day before or after. Black tacks show weekly inspections. White thumb tacks with the initials of the various inspection points—*J* for Grand Junction, *B* for Burnham (Denver) and *SL* for Salt Lake City—are inserted in the board in place of the colored tacks as soon as word is received that the work has been done.

Inspection Requirements

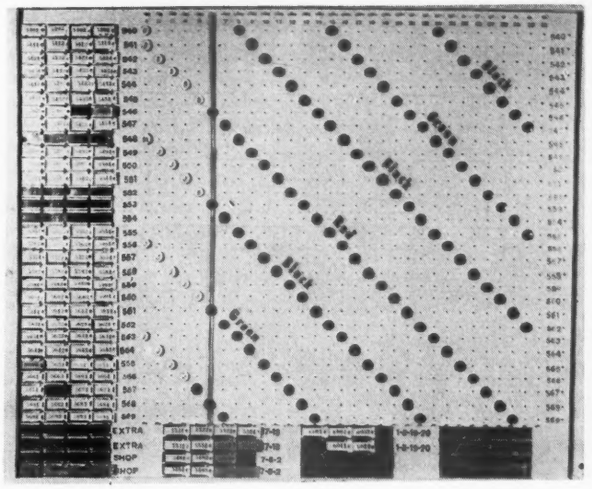
Government inspection requirements are on a time basis and other maintenance is tied to this schedule. Oil changes are made only on laboratory instructions and at such times locomotive units are held until difficulties are found and corrected. With this procedure, many original cylinder liners and crankshafts are running well in excess of 1,000,000 miles.

The principal point for annual federal inspections and heavy diesel repairs is the Burnham shops, where two units are generally worked on at one time. The effort is to keep a stable force so as to hold experienced diesel mechanics and electricians on this work. Spot, daily and weekly checks of locomotive condition are made at engine terminals in Denver, Grand Junction and Salt Lake, two passenger locomotives and freight helper diesels being maintained at the latter point. Intermediate inspections are largely handled at Salt Lake.

In general, the endeavor is made to keep all units of a diesel locomotive together during operation, inspection and repairs, but this is not always possible and the flexibility gained by being able to substitute one unit for another is an important advantage of this type of power.

With about 30 diesels to be handled in a 30-day month at each of three inspection points on the D. & R.G.W., the various colored thumb tacks follow quite a uniform pattern at a 45-deg. angle across the board which means fairly uniform work throughout the month. This result was not achieved at a moment's notice and the schedule is still subject to occasional upsets, but experience has shown how to get back in line again and prevent bunching too many similar operations in one shop on the same day.

Another thing carefully watched is not to mix up the locomotive types any more than necessary in any one shop. For example, FT diesels are generally handled in the first 11 days of the month, F3 locomotives the next 10 days and F7 locomotives in the last 10 days. Steam-



Diesel locomotive control board or maintenance calendar.

Thumb-tack colors:

Black — Weekly inspections
Green — Semimonthly inspections
Red — Federal inspection
White — Work completed

Form DM-1
12-51

THE DENVER AND RIO GRANDE WESTERN RAILROAD COMPANY

Lead "B" "B" Trailing

ALL UNITS

LOCATION DATE

SHORT - POINT CHECK - THRU ENGINES - EMD FT-F3-F7-GP7, ALCO 2000-1600 HP

TIME CARD CHARGE CODE		WORK DONE OR CHECKED BY
F	1. Fuel oil supply.	
W	2. Engine cooling water supply.	
S	3. Speed recorder tape marked and tape supply.	
C	4. Cab and windows clean.	
S	5. Cab drinking water and ice supply.	
S	6. Flagging equipment.	
L	7. Engine lubricating oil level and pressure.	
S	8. Sand supply checked.	
M	9. Visual inspection made of running gear - both sides.	
M	10. Air box drains checked for any unusual discharge (EMD).	
M	11. Sander operation checked.	
M	12. Drain main reservoir and auxiliary reservoir.	
M	13. Remove work report and check log book and sign for work done.	

APPROVED
Foreman

Explanation of Time Card Charge Code:

Code	Make Charge on Time Card, as Follows:
C	Clean Diesels
F	Fuel Diesels
L	Lubricate Diesels
M	Inspect and Repair Dieselse
S	Supply Diesels
W	Water Diesels

• All items with "M" Code should be charged direct to Diesel Unit Number.

Short form recording inspection of diesel power at intermediate points.

Table 5—Diesel Freight Service—Operating Comparison, 1951

	First Quarter		Second Quarter		Third Quarter	
	D.& R.G.W.	Average all roads*	D.& R.G.W.	Average all roads*	D.& R.G.W.	Average all road*
Operating costs and consumption per thousand G.T.M.						
Operating costs in cents:						
Repairs	17.07	11.49	14.17	11.58	12.05	11.47
Fuel	24.81	17.17	22 39	16.63	22.03	16.15
Lubricants	1.50	.90	1.37	.86	1.44	.88
Total	43.38	29.56	38.43	29.07	35.52	28.50
Operating costs and consumption per unit mile						
Fuel	2.60	1.82	2.40	1.75	2.31	1.71
Lubricants	.025	.017	.022	.016	.022	.017
Operating costs and consumption per unit mile						
Operating costs in cents:						
Repairs	12.65	12.82	11.23	13.12	9.60	13.09
Fuel	18.38	19.18	18.13	18.70	17.56	18.64
Lubricants	1.11	1.02	1.08	.96	1.15	1.02
Total	32.14	33.02	30.44	32.78	28.31	32.75
Consumption in gallons:						
Fuel	1.93	2.02	1.90	1.95	1.84	1.93
Lubricants	.018	.019	.017	.018	.018	.019

*As taken from report, prepared by Electro-Motive Division, General Motors Corporation.

TABLE 6.—COST OF DIESEL LOCOMOTIVE REPAIRS (CENTS PER MILE)

	1951	1950
January	48.76	37.41
February	34.34	43.73
March	40.34	38.10
April	38.22	39.64
May	39.82	34.09
June	41.01	31.87
July	36.18	42.43
August	37.07	40.57
September	36.15	34.65
October	37.32	39.60
November	38.98	39.01
December	48.88	50.22
Average	39.76	39.35

generator repairs are concentrated in the middle of the month.

The inspection and maintenance schedule is relatively simple in use, requires little clerical work and can be easily kept up to date. Mimeograph reproductions of the schedule are available for general office use, and for master mechanics, dispatchers and enginehouse clerks who telephone necessary information to the general office as required. Log books carried on the lead locomotive units contain a record of information especially helpful to repair men at terminals where the locomotives are maintained.

BENCH MARKS AND YARDSTICKS—10

"Look out for the unlucky in picking your supervisors!" is the advice of a railway officer who doesn't want to be identified, even by occupation. He goes on to explain that, for some obscure reason, there are people who have more than their share of misfortunes—and an employer should be wary about getting such unlucky persons into positions of responsibility.

This warning is given some support by Dr. Flanders Dunbar, a specialist in "psychosomatic medicine," who asserts† that "some deft, seemingly well-balanced men and women turn up repeatedly in the accident wards of our hospitals." Dr. Dunbar goes on to say that "only about 10 to 20 per cent of all these injuries, fatal or otherwise, are caused by really accidental accidents. The rest are linked to the personality of the victim."

While the statistical proof of "accidentitis," apparently, is limited to physical injuries, our informant insists that other kinds of "hard luck" have a way of picking regularly on certain hapless individuals—because of some, as yet, obscure quirk of personality. And an employer ought to be alert to detect such people and put them to work where their misfortunes, if habitual, will have the least impact on other people, or on their own work.

We pass this one along with the hope that any of our readers whose experience goes with that of our informant will let us know. Or if anybody can prove that he's all wrong, that information would be equally welcome.

The correspondence we are currently getting indicates that the situation of railway supervisors is in an active state of ferment. In many places constructive and effective attention is being given to this situation by railway managements—in others conditions are not so encouraging. One supervisor writes: "How do you like this—our employees actually feel sorry for us supervisors?"

It seems evident that a lot of railroads could profitably look around and find out what roads are doing the best job in selecting supervisors, and gaging supervisory performance; and then adopting these successful methods throughout the industry.

[We'd welcome any opinions you may have based upon your own specific experience which might bring to light useful information toward establishing a better set of "bench marks" or "yardsticks" for the railroad industry, or for any position or department. As it now is, standards of performance—quantitative or qualitative—vary widely from road to road; and not all of them can be right. The problem may be as much that of discarding traditional standards and qualifications as of finding better ones. Surely almost every railroad man has some constructive thoughts to contribute to such a discussion, and we'd like to give our readers the benefit of yours. Of course, we will completely conceal your identity unless you specifically state that you won't mind its being revealed. Please write to the editor, RAILWAY AGE, 30 Church street, New York 7.]

† In "Mind and Body," published by Random House, New York.

Wood Treaters Consider Railroads' Needs

Left—L. T. Nuckols (Chesapeake & Ohio) told of the many applications of treated wood on his road. Right—F. R. Denney (Texas & Pacific) reviewed the practices and experiences of the T. & P. with the use of treated wood in railroad cars.

Many railroad men attended and participated in the forty-eighth annual meeting of the A. W. P. A. at New York

While the railroads have long been large consumers of treated wood, opportunities for the use of such wood on the railroads are far from exhausted. Furthermore, rather than resting on its laurels, the wood-preserving industry is constantly coming up with improvements in the techniques and materials for preservative treatment, which have the effect of adding to the value of treated wood and of broadening its scope of usefulness. These conclusions are supported by material presented in committee reports, addresses and discussions at the forty-eighth annual convention of the American Wood-Preservers' Association, held at the Hotel New Yorker, New York, April 22 to 24, inclusive.

Railroaders Were Active

In keeping with the continuing importance of treated wood on the railroads, their representatives, as usual, took a prominent part in the proceedings, participating both as speakers, as session chairmen and coordinators and as interested listeners from the convention floor. During the three-day meeting there were five technical sessions, each of which had a session chairman and a session coordinator. Railroad men acting as session chairmen were W. F. Dunn, Sr., tie and timber agent of the Southern, Washington, D. C., and A. S. Daniels, Texas & New Orleans (Southern Pacific Lines in Texas and Louisiana), Houston, Tex. Railroad men acting as session coordinators were G. B. Campbell, tie and timber agent of the Missouri Pacific, St. Louis, Mo., and J. S. Giddings, assistant manager treating plants of the Atchison, Topeka & Santa Fe system, Topeka, Kan. Still another contingent of railroad men appeared on the program as chairmen of technical committees. All sessions were under the general supervision of W. R. Yager, inspection engineer of Western Electric Company, New York, president of the association.

In the 15 addresses and 28 technical committee reports presented at the convention practically everything was of direct or indirect interest to railroad users of treated wood. However, two addresses were of particular interest to this segment of the audience. One was by L. T. Nuckols, chief engineer of the Chesapeake & Ohio, Richmond, Va., who spoke on "Diversified Uses of Treated Wood on Railroads," while the other was a paper by F. R. Denney, assistant mechanical superintendent of the Texas & Pacific, Dallas, Tex., on "The Use of Treated Lumber for Railway Car Repair and Construction."

Sixty-Nine Years of Experience

As an indication of the extent to which treated wood is used on the railroads, Mr. Nuckols said that creosoted pressure-treated materials have been used by the Chesa-

Frank H. Fischer (Koppers Company), R. R. Poux (Erie), H. L. Beiter (Lehigh & New England), W. F. Fegley (Delaware, Lackawanna & Western), and L. Perez (O.P.S., Forest Products Division).

G. B. McGough (Bond Bros.) and C. D. Turley (Illinois Central).

A. S. Daniels (T. & N.O.) and R. F. Drietzler (West Coast Wood Preserving Company).

L. E. Lockwood (Public Service Company of Northern Illinois), G. M. Hunt (Forest Products Laboratory, retired) and R. H. Bescher (Koppers Company).

R. J. Kepfer (E. I. du Pont de Nemours & Co.), Clarence S. Burt (Illinois Central) and E. H. Reiman (also du Pont).

H. M. Harlow and M. J. Hubbard (both Chesapeake & Ohio).

Paul Wayman and R. R. Clegg (both American Lumber & Treating Co.).

peake district of the C. & O. for about 69 years for pier piles and timbers, and since 1916 for crossties, bridge ties, timber-frame and pile trestles, bulkhead timber, switch ties, poles, fence posts and miscellaneous structural lumber. The use of treated materials on the C. & O. for all these purposes was traced in some detail by Mr. Nuckols, and figures were presented to show how the railroad has benefited through the increased life of its ties and timber structures.

Preframing Trestles

Considerable service life has been added to bridges and structures, said Mr. Nuckols, by the practice of preframing and boring lumber and timber before treatment. Bridge-tie framing on the C. & O. dates back to 1926. The preframing of all timber trestles was started in 1930. At that time the railroad began using the lap-chord stringer design which gives a full bearing of the stringers on the cap, replacing the butt-stringer design. At the framing plant, the caps are laid out in the yard on the same alinement as the track for which the timbers are being framed. The stringers are laid out on the caps, bored and marked according to plan, then pressure treated. All trestle bents are handled in a similar manner.

One of the uses to which treated timber is being put on the C. & O. is in the construction of railway-highway grade crossings on heavy traffic lines where "it is very difficult to maintain a smooth crossing due to vibration of the rails and slight pumping of the crossties." The road has overcome this problem to a large degree, said Mr. Nuckols, through the use of creosoted laminated timber crossing slabs which "are rather expensive on original installation, but are showing a maintenance saving over a period of years." He then described in some detail the construction of the laminated slabs, pointing out that they are treated with creosote with a retention of 8 lb. of preservative per cubic foot. Similar slabs are also used in the construction of station platforms, for which purpose they are steam cleaned or treated with pentachlorophenol.

After describing a test inflation of treated fence posts in which creosote-treated chestnut and pine posts gave the best results, Mr. Nuckols noted that the railroad had used a considerable quantity of fire-retardant treated

lumber and timber in roundhouse structures, retail coal trestles and bins, tunnels, freighthouses and warehouses. He also stated that since 1949 the road had been pressure treating, with a five-per cent solution of "penta" in petroleum, decking for station platforms and sign posts where a clean treatment is desired. "No doubt treatment with this or similar preservatives," he said, "will increase in the future to prolong the life of some building lumber."

Treated Material for Cars

According to Mr. Denney, the first test of the use of treated lumber in freight cars was undertaken on the Texas & Pacific during 1927. This test involved a single car. In the following year a more comprehensive test involved the application of creosoted yellow pine decking to 300 flat cars. In this latter test the average life of the decking was 15 to 16 years. The road's experience with untreated freight-car decking has shown, according to Mr. Denney, that it has a life of about five years. Following these early tests with treated lumber, it was made standard on the T. & P. for all stock-car decks and roofs. Subsequently a test of lumber treated with chromated zinc chloride was started on some of the company's ballast cars, and still later a test of pentachlorophenol for this purpose was undertaken.

The relation of decay to mechanical damage in wood members of cars was also discussed by Mr. Denney. He reported that several railroads are participating in a test to determine if pressure treatment to eliminate decay will reduce the incidence of mechanical breakage. The progress of this test is being watched with interest.

Economies in Freight Cars

Pointing out that much has been written and said about the economies of treated lumber in freight-car construction and repair, Mr. Denney presented a table showing that the return on the investment in treated lumber for use on cars is 62 per cent for box cars, 63 per cent for stock-car flooring, 53 per cent for flat-car flooring, and 55 per cent for the flooring of open cars.

"Certainly," he said, "every car department and general mechanical officer should be motivated to action in the use of treated lumber. Imagine the argument you would get from an engineering maintenance officer if he were told he had to use non-treated ties, and then think for what reason we in the mechanical department often use untreated lumber in a place where it should be treated, simply because we did not start anticipating our requirements sufficiently in advance of our shopping programs or because of some other lame excuse."

Some interesting figures on the use of treated lumber in railroad cars were contained in the report of Committee C-15, Railroad Car Lumber. Pointing out that the committee has no official method of gathering figures to secure the quantity of materials treated from year to year, this committee presented a tabulation of the treated material that was installed in railroad cars in 1951. While this table "should not be considered as full coverage for the entire industry," the total shown for that year was 17,472,317 bd. ft., which compares with a total of 6,373,890 bd. ft. for 1950.

Pertinent Committee Recommendations

Numerous recommendations involving standards and tentative standards of the association were made by the various committees. The Treatment Methods committees were particularly active in making recommendations. One of the recommendations made by Committee T-2, Pines, Southern, Jack, Ponderosa, Lodgepole and Norway, had to do with the recommendation adopted a year ago to the effect that the tentative standard for conditioning jack pine, red pine and lodgepole pine posts and poles be amended to permit steaming for short periods under certain conditions. This year the committee recommended that the tentative revisions be confirmed as adopted standards. This recommendation was approved. Also approved was a similar recommendation relative to the standard covering the treatment of jack, lodgepole, and red pine piles.

Among the recommendations of Committee T-3, Douglas fir, Larch, Western Red Cedar and Western Hemlock, was one to the effect that the amendments to the standard for treating Pacific Coast Douglas fir piles, which were adopted last year on a tentative basis, be confirmed and advanced to standard. A similar recommendation was made regarding a standard for the treatment of western larch piles. Both of these recommendations were approved.

Brand Names Dropped

Among the Preservatives Committees, Committee T-4, New Preservatives, acting on a decision of the Executive committee to the effect that trade names should not be used in any of the standards of the association, recommended changing the names of five preservatives for which tentative standards were adopted last year. The recommendation here was to change Boliden Salt to chromated zinc arsenate, Celcure to acid copper chromate, Chemonite to ammoniacal copper arsenite, Copperized CZC to copperized chromated zinc chloride, and Greensalt to chromated copper arsenate. This recommendation was approved.

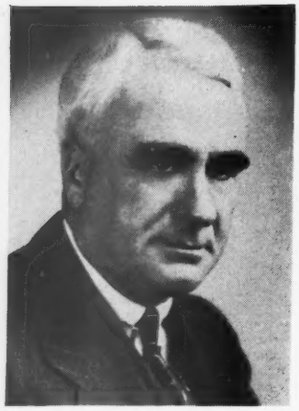
Some interesting information was presented in several of the reports of the Utilization and Service Records committees. For instance, Committee U-3, Service Records, presented tabulations giving the results of the Forest Products Laboratory inspection of the experimental test ties in the special test tracks of the Chicago, Milwaukee, St. Paul & Pacific at Madison, Wis., and at Hartford, Wis. It emphasized that, of the 1,701 ties installed at Hartford, 562, or approximately 33 per cent, are still in track after more than 40 years of service. Committee U-6, Pile Service Records, reported this year on an installation of marine piles near Corpus Christi, Tex. The installation is the Nueces Bay Causeway built by the state of Texas in 1921. "The excellent service rendered by these creosoted piles over a period of almost 30 years in marine borer infested waters makes this an outstanding record," said the committee.

Election of Officers

In the election of officers R. H. Bescher, manager of technical department, Koppers Company, Orrville, Ohio, was advanced from first vice-president to president; P. D. Brentlinger, forester, Pennsylvania, Philadelphia, Pa., was advanced from second vice-president to first vice-president; and I. C. Miller, vice-president, T. J. Moss Tie Company, St. Louis, Mo., was elected second vice-president. Newly elected members of the Executive committee are R. F. Dreitzler, vice-president-manager, West Coast Wood Preserving Company, Seattle, Wash., and W. F. Dunn, Sr., tie and timber agent, Southern system, Washington, D. C. W. A. Penrose was re-elected secretary-treasurer. It was voted to hold the next annual meeting at Cleveland, Ohio.

Paul Renshaw Elected Chairman of General Railway Signal

Paul Renshaw



Herbert W. Chamberlain

Paul Renshaw, president of the General Railway Signal Company since February 8, 1936, has been elected chairman of the board, a newly created position. Mr. Renshaw is succeeded as president by Herbert W. Chamberlain, executive vice-president of the firm since January 1, 1950.

Mr. Renshaw was born on December 21, 1888, in Troy, N. Y., and was graduated from Columbia University with a civil engineering degree in 1911, when he began signal construction work with the Federal Signal Company. After a year with the signal department of the New York, Westchester & Boston and with the General Vehicle Company, he was successively engaged in testing, inspecting and engineering with Federal Signal, becoming assistant to the president and vice-president.

When this country entered World War I Mr. Renshaw was commissioned a first lieutenant in the Army's Ordnance Department and was engaged in the manufacture of cannon. Early in 1918 he resigned from the Ordnance Department and enlisted in the Navy as a chief boatswain's mate. He was later commissioned an ensign and assigned to the U.S.S. Delaware until the end of the war, after which he returned to Federal Signal.

In 1924, when Federal Signal merged with General Railway Signal, Mr. Renshaw was appointed sales manager. He became vice-president in 1928 and president in 1936.

Mr. Chamberlain's Career

Mr. Chamberlain was born on January 25, 1890, in Rochester, N. Y. He was educated in the public schools and at the Rochester Institute of Technology. Mr. Chamberlain began his business career by joining General Railway Signal when it was organized in 1904, first working in factory production. He was transferred to the financial department and in 1913 he was appointed auditor and assistant treasurer of the subsidiary General Railway Signal Company of Canada, at Montreal. In 1918 Mr. Chamberlain became vice-president of the Canadian firm and two years later succeeded to its presidency.

From 1922 to 1924 he was president of the Cyclemotor Corporation and for the next three years he served as vice-president of the General Railway Signal Products Corporation at Albany, N. Y. In 1927 he was appointed assistant treasurer of General Railway Signal and six years later he was elected secretary. He was appointed assistant to the president in 1937, sales vice-president in January 1945, and executive vice-president in 1950. Mr. Chamberlain, like Mr. Renshaw a member of the Signal Section of the Association of American Railroads, is a past chairman of the Signal Appliance Association.

General Railway Signal—which manufactures, installs and deals in mechanical, electrical and pneumatic systems for control of traffic on railroads—was incorporated on June 13, 1904, in New York and acquired the plants and properties of the Taylor Signal Company of Buffalo and the Pneumatic Signal Company of Rochester. In November 1924 it acquired Federal Signal of Albany. Subsequently, the Buffalo and Albany plants were disposed of and operations were concentrated at Rochester. In 1940 the Rochester plant of the Yates-American Machine Company was purchased and in June 1944 the stock of Electrons, Inc., was acquired for 10,051 General Railway Signal common shares. In September 1947, General Railway Signal and a Dutch firm organized a company to market G.R.S. products in various European countries. It now has associated companies or representatives in Argentina, Brazil, Chile, Colombia, Mexico, Uruguay, Venezuela, the Federated Malay States, India, Pakistan, South Africa, Australia, New Zealand and elsewhere.

General Railway Signal's automatic switching and car retarder system, one of the firm's latest types of installation, has been placed in service in three yards and is under construction in four other yards. In addition, two more such installations have been contracted for. In the system, control of switches is automatic after being initiated at the crest of the hump, and all retarders are controlled by one man. Such systems are in service in the Illinois Central's southbound classification yard at Markham Yards in the Chicago area (*Railway Age*, June 17, 1950, page 58), in the Canadian Pacific's St. Luc yard, Montreal (*Railway Age*, August 12, 1950, page 28), and in the Southern's John Sevier yard, Knoxville, Tenn.

Installations of this system are under construction in the Southern's Ernest Norris yard, Birmingham, Ala.; the Elgin, Joliet & Eastern Kirk yard, Gary, Ind.; the Reading's eastbound Rutherford (Pa.) yard; and in the Norfolk & Western's Lamberts Point yard, near Norfolk, Va. Systems have been contracted for by the Denver & Rio Grande Western, for its yard at Grand Junction, Colo., and by the National of Mexico, for its new yard near Mexico City.

In the firm's annual report for 1951 (selected data from which were published on page 110 of the March 17 *Railway Age*), Mr. Renshaw said: "A number of new devices were brought out in 1951, but the chief effort was to perfect and refine the systems conceived in previous years. Because safety is paramount in railway signaling, much time and expense are necessary to commercialize these modern, complex systems. New systems of train control as well as modifications of existing systems were under active investigation."

Jobless Pay Liberalizer Approved by Congress

The House on May 5 passed the Senate-approved bill to liberalize benefit provisions of the Railroad Unemployment Insurance Act. The favorable action came without a record vote, unanimous consent having been obtained for immediate consideration of the bill when it was reached on the call of the House calendar.

The bill, S.2639, was passed by the Senate on April 24 (*Railway Age*, May 5, page 13). Since the House made no change in the Senate version, the bill went to President Truman.

M.P., S.P., and Affiliates, Seek Increase in Fares

An application for a 10 per cent increase in passenger fares has been filed with the Interstate Commerce Commission by the Missouri Pacific and the Southern Pacific, and their affiliates, including the Texas & Pacific, St. Louis Southwestern, Texas & New Orleans, Northwestern Pacific and Pacific Electric.

The proposed increases would bring the applicants' basic one-way coach fare up to 2.75 cents per mile, and the fare for travel in sleeping and parlor cars up to 3.85 cents per mile. An increase, from 15 cents to 20 cents, in the minimum one-way fare is also proposed.

U.P.'s Stoddard Elected Director of U. S. Chamber

Arthur E. Stoddard, president of the Union Pacific, has been elected to membership on the board of directors of the Chamber of Commerce of the United States. He succeeded C. McD. Davis, president of the Atlantic Coast Line, and is one of the "transportation and communication" representatives on the board.

W.P. to Spend $53 Million In Five Years, 1951-55

A five-year, $53-million expansion and improvement program for the Western Pacific was announced by Frederic B. Whitman, president of that company, in the course of an address to the railroad section of the fifth annual convention of the National Federation of Financial Analysts Societies at San Francisco on May 5. Other aspects of Mr. Whitman's talk are covered elsewhere in these pages.

Details of the expenditure—much of which, of course, has already been made or committed, and which Mr. Whitman said would be even higher "if inflation continues"—are as follows:

For new equipment, including diesel locomotives ($4,740,000), maintenance-of-way work equipment ($836,000), freight cars, a car barge and a heavy-duty derrick —$22,795,000.

For signals, including completion of traffic control system on the entire main line between Oakland and Salt Lake City, except on paired track in Nevada, and on the Northern California extension between Keddie and Almanor—$5,400,000.

For new and heavier rail—$9,763,000; ballast — $1,560,000; siding extensions — $1,928,000; miscellaneous trackage in yards and elswhere—$1,116,000; bridges, trestles and culverts—$728,000; radio communications, particularly on road locomotives and cabooses—$800,000; building improvements other than diesel facilities—$705,000; miscellaneous improvements including tunnel work, industrial development, and diesel fueling and servicing facilities at Portola, Cal., and elsewhere—$9,216,000.

In addition, a proposed flood control, power and irrigation dam on the Feather river near Oroville, Cal., may require relocation of some 27 miles of the W.P.'s main line north and east of that point. The new line, to be paid for by government agencies building the dam, would have the same 1 per cent ruling eastbound grade as the present line, but would be about two miles shorter. Although the dam would raise the level of water in the Feather river by some 700 feet, it would not destroy the W.P.'s scenic route through the river's canyon, H. C. Munson, W.P. vice-president and general manager, told *Railway Age* at San Francisco.

Tariff Study Group Reports On First Questionnaire

The Railroads' Tariff Research Group won't recommend a change in the present practice of setting up item numbers adjacent to the left margin on right-hand pages of freight tariffs.

This is the result of the research group's Questionnaire No. 1, which was submitted to 281 tariff-using establishments (*Railway Age*, March 31, page 58). The 252 returns received to date show an "overwhelming preference" of tariff users for the present practice, the research group reported.

Amortization Certificates

Certificates of necessity for accelerated tax amortization of facilities were awarded to three railroads during the April 3-10 period, the Defense Production Administration has announced.

The Chesapeake & Ohio was authorized to apply accelerated amortization to 40 per cent of expenditures totaling $170,000; the Central Pacific, 40 per cent of expenditures totaling $1,453,726, and the Pennsylvania, 40 per cent of expenditures totaling $169,490.

Additional fast write-off certificates were awarded during the period from April 11 to April 17. The Delaware & Hudson was authorized to write off 55 per cent of $10,500,000; the Kansas City Southern, 55 per cent of $961,000, and the Wabash, 70 per cent of $9,150,492.

Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended May 3 were announced by the Association of American Railroads on May 8 as follows:

	Surplus	Shortage
Plain Box	4,335	465
Auto Box	234	0
Total Box	4,569	465
Gondola	986	459
Hopper	1,009	411
Covered Hopper	10	19
Stock	1,781	24
Flat	9	658
Refrigerator ...	9,106	183
Other	610	0
	18,080	2,219

B.R.T. May Seek Wage Increase

President W. P. Kennedy of the Brotherhood of Railroad Trainmen called the brotherhood's wage and rules committee to a May 1 meeting in Washington, D.C., to discuss the possibility of a wage increase based on the "improvement factor."

Under its May 25, 1951, agreement with the carriers, the B.R.T. can seek a wage boost after July 1, based on increased productivity of employees. Such an increase would be over and above any cost-of-living increases resulting from a rise in the consumers' price index. The May 25 agreement exempted any "improvement factor" wage increase from the general moratorium on wages and working rules which runs through September 30, 1953.

ORGANIZATIONS

Railway Development Group Meets in Quebec May 11-14

The Chateau Frontenac, Quebec, is the scene of the 43rd annual meeting of the American Railway Development Association which began on May 11 and will continue through May 14.

Following the procedure of past meetings, the group has programmed a number of sectional meetings for its agricultural, industrial and real estate subdivisions as well as general business sessions. The real estate section will

hear round table discussion of such questions as: Methods of determining fair values for air rights above railroad property; exchange of real estate as opposed to outright sale; assessment and taxation on coal lands during, and at completion of, mining. The industrial section will consider: The private industrial district — past and future; community planning for industry; and financing industrial buildings.

Dr. J. A. Retty, chief geologist, Iron Ore Company of Canada, Montreal, will address a meeting of the combined sections on Quebec and Labrador mining developments. H. W. Coffman, manager of indu-trial development, New York Central, Chicago, who is president of the association, will preside over the business sessions.

The regular monthly meeting of the **Women's Traffic Club of New York** will be held at the Park Sheraton Hotel, 55th street and 7th avenue, on May 13, at 7 p.m.

The **Women's Traffic Club of Metropolitan St. Louis** will hold its next meeting on May 15 at the Glen Echo Country Club. John C. Farris, manager customers' business department, Union Electric Company, St. Louis, will be the guest speaker.

The Third Annual Conference on Domestic Appliances, of the **American Institute of Electrical Engineers,** will be held in the Engineering Society building, Cincinnati, on May 17. Among the speakers will be T. C. Freedom, chief field engineer, Aircraft-Marine Products, Inc., Harrisburg, Pa., whose subject will be "Solderless Wiring Devices for Domestic Appliances." Mr. Freedom's talk will be illustrated with a sound color film entitled "All's Well That Ends Well."

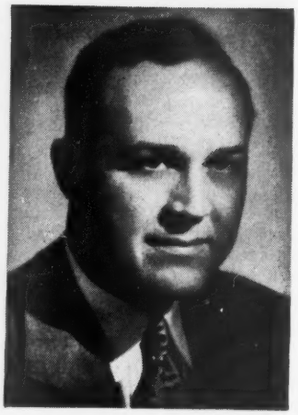
The first annual transportation and traffic management conference conducted by the **Transportation and Traffic Management Institute** at Northeastern University will be held on May 21-22.

SUPPLY TRADE

Paul D. Merica, executive vice-president and a director of the **International Nickel Company of Canada,** has been elected president to succeed **John F. Thompson,** who will continue as chairman of the Board and chief officer of the company. **R. Leslie Beattie,** vice-president and general manager of the company's Canadian operations, has been elected a member of the executive committee of the board and a director of the company's United States subsidiary, the International Nickel Company, transferring his headquarters from Copper Cliff, Ont., to Toronto. **H. C. F. Mockridge** of Toronto also has been elected to the executive committee of the board. Concurrently with Mr. Beattie's transfer, **J R. Gordon,** assistant vice-president, has been appointed also assistant general manager, and in these capacities will manage all Canadian activities under direction of Mr. Beattie. **Ralph D. Parker,** assistant vice-president, has been elected vice-president and a director of another subsidiary, Canadian Nickel Company, and **William F. Kennedy** has been appointed secretary, succeeding **Henry S. Wingate,** who will devote his full time as vice-president and a director of the company .

The following executive changes for the United States subsidiary also have been announced: Mr. Mercia has been elected president and Mr. Thompson will continue as chairman of the board. **Walter C Kerrigan,** vice-president, has been elected to the newly created position of vice-president and general sales manager, responsible for both nickel and mill products sales, with **L. R. Larson,** elected assistant vice-president and assistant general sales manager **Theodore H. Dauchy, Richard A. Cabell** and **John A. Marsh** have been promoted to assistant vice-presidents.

Robert W. Sherk, sales manager for **General Motors Diesel Ltd.** at London, Ont., has been appointed parts manager of aircraft engine operations at G.M.'s Allison Engine division at Indianapolis. **John H. Ayre,** director of manufacturing facilities and service at London, has been named administrator of material control and model shop in the division's turbo-prop plant at Indianapolis.



E. J. Brown, whose appointment as assistant to vice-president, American Locomotive Company, was announced in last week's *Railway Age*. Mr. Brown in his new capacity, is in charge of the new Richmond, Va., sales office of the firm's railway steel spring division. He joined the company in the Chicago sales office in 1935 and for the last five years has been assigned to the Cleveland, Ohio, office.

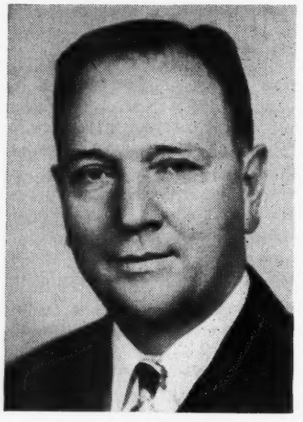
The company also has announced that W. J. Horstmann, formerly with the railway steel spring division in New York, will replace Mr. Brown at the Cleveland sales office.

W. L. Klatt, assistant manager of the weed control division of the **Pacific Coast Borax Company,** has been appointed Denver district manager of the division. **J. R. Parke,** formerly with the package division, has been named representative for the weed control division at Philadelphia.

The **Union News Company** has appointed **Robert R. Geiger,** for many years manager of the Grand Central Terminal Restaurant and Oyster Bar in New York as superintendent of restaurants in the Philadelphia area, which includes 30th Street Station, Suburban Station, North Philadelphia and Reading Terminal.

The **Worthington Corporation** has redesignated its Dunellen, N. J., plant as the Plainfield Works. The name and address of the plant is: Worthington Corporation, Plainfield Works, Plainfield, N. J.

Joseph P. Kleinkort, formerly general sales manager of the Ramapo Ajax division of **American Brake Shoe Company,** has been appointed vice-president of the division. Mr.



Joseph P. Kleinkort

Kleinkort joined the Ramapo division at the East St. Louis plant in 1923. He entered the sales department in 1936 and was appointed district sales manager in 1945 and general sales manager in 1948.

John A. Robinson has been appointed sales manager of the Eastern and Mid-Atlantic regions for the industrial division of the **Minneapolis-Honeywell Regulator Company.** The company also has announced appointment of **Joseph J. Matulis** as industrial manager for the Midwest region to succeed Mr. Robinson, and the promotion of **C. G. Behnke** to industrial manager of the Chicago branch office.

Benjamin F. Fairless, president of the **United States Steel Corporation,** has also been elected chairman of the board of directors to succeed

Irving S. Olds, who has reached the corporation's retirement age. Mr. Fairless will continue as president of the United States Steel Company, the steel operating subsidiary in Pittsburgh. Mr. Olds will resume active practice of law with the New York law firm of White and Case, of which he has been a member since 1917.

Roger M. Blough, executive vice-president—law and secretary, United States Steel Company, has been appointed vice-chairman of the board of directors.

The **United States Steel Company,** a subsidiary of the **United States Steel Corporation,** at Pittsburgh, has established a transportation department which will be responsible for coordinating transportation services to meet all plant requirements. **J. W. Hoover,** formerly general traffic manager, has been appointed general transportation manager, manufacturing division.

The **Gustin-Bacon Manufacturing Company,** Kansas City, has extended the distributing territory of the **Western Fiberglas Supply Company,** of San Francisco, to include the entire Pacific coast and Alaska. Western Fiberglas Supply has opened new offices in Seattle, Wash., and will soon add branch offices in Spokane, Portland, Ore., and in Alaska.

The **Westinghouse Electric Corporation** has elected three vice-presidents, to head 12 of the 31 divisions of the company, as follows: **W. W. Sproul,** vice-president in charge of the general industrial products group of divisions; **L. B. McCully,** vice-president in charge of the East Pittsburgh divisions; and **H. E. Seim,** vice-president in charge of the Sturtevant division, with headquarters at Boston, and also the Bryant Electric Company, a wholly owned subsidiary at Bridgeport, Conn.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Delaware, Lackawanna & Western** has ordered 100 70-ton covered hopper cars from the American Car & Foundry Co.

The Fruit Growers Express Company has ordered 500 50-ton type RB refrigerator cars from the Pacific Car & Foundry Co. For delivery beginning the third quarter of 1952.

SIGNALING

The **Atlantic Coast Line** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company necessary material to install centralized traffic control on 75 miles of single track between Manchester, Ga., and Atlanta. The Style C control machine will be installed at Manchester Division headquarters. The order includes code equipment, Styles H-2 high and N-2 dwarf signals, M-23B dual-control electric switch machines, T-21 switch stands, SL-25 and SL-26 electric switch locks, coded track circuit apparatus, relays, rectifiers, transformers, and housings. Field installation work will be handled by railroad construction forces.

The **Chicago, Burlington & Quincy** has ordered equipment from the General Railway Signal Company for the installation of a traffic control system between Pacific Junction, Iowa and Lincoln, Neb.

The **Cleveland Transit System** has ordered equipment from the General Railway Signal Company for the installation of three electric interlocking systems.

The **New York Central** has ordered equipment from the General Railway Signal Company for the installation of a remote control interlocking at Meigs, Ohio.

LOCOMOTIVES

The **Utah Railway** has ordered from the American Locomotive-General Electric Companies three six-axle, six-motor, 180-ton, 1,600-hp. diesel-electric road-switching locomotive units. These locomotives, to cost approximately $215,000 each, are scheduled for delivery next August and September.

ABANDONMENTS

Application has been filed with the I.C.C. by:

PACIFIC ELECTRIC.—To abandon two segments, totaling 16.1 miles, at Los Angeles, Cal. The road plans to replace present rail passenger service on these lines with motor coach service. It told the commission the change would reduce losses from passenger operations and avoid large expenditures in connection with street reconstruction projects the city is undertaking.

Division 4 of the I.C.C. has **authorized:**

NORFOLK SOUTHERN.—To abandon its branch line between Star, N. C., and Asheboro, 23.2 miles, as well as a 6.2-mile segment of its so-called Ellerbe branch, extending from Plainview, N. C., to Ellerbe. Division 4 denied the application for authority to abandon that portion of the Ellerbe branch extending from Candor to Plainview, about 11.3 miles. Commissioner Mahaffie, in a dissenting opinion, said losses from operation of the Ellerbe branch are "very small," and the commission should deny the application for authority to abandon this branch "in its entirety."

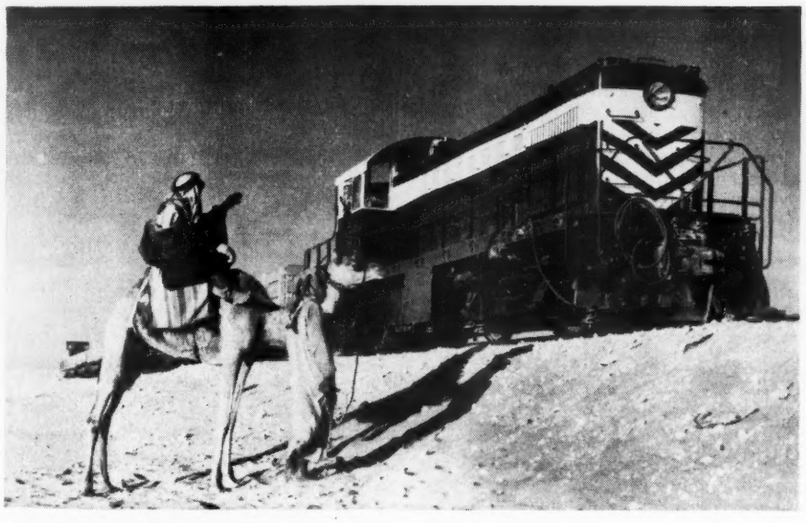
The order authorizing abandonment of the Star-Asheboro line noted that the Highpoint, Randleman, Asheboro & Southern, a Southern subsidiary, has agreed to purchase approximately 3 miles of the abandoned line at Asheboro. It would pay $64,000 for the segment.

CAR SERVICE

Third Revised I.C.C. Service Order No. 95 has been modified by Amendment No. 1 which set back the expiration date for a year—from April 30, 1952, until April 30, 1953. The order makes D. W. Benton, assistant to chairman, Car Service Division, Association of American Railroads, the I.C.C.'s agent for keeping the commission informed as to the refrigerator car situation.

I.C.C. Service Order 865, which imposes super-demurrage charges running up to $20 per day, has been suspended until May 16. The suspension order was No. 865-A. Previously the order, now scheduled to expire May 31, had been suspended as to all cars except gondolas and flats.

Special Car Order No. 85 has been issued by the Car Service Division, Association of American Railroads, to expedite the return home of plain box



AN ANCIENT MODE OF TRAVEL meets a modern American Locomotive-General Electric diesel unit along the Saudi Arabia government railroad.

cars (XM type) owned by 13 western railroads which are preparing for the grain movement. The order became effective May 10 and will remain in effect "until further notice."

CONSTRUCTION

Chesapeake & Ohio.—The following projects have been authorized, at indicated probable costs: Shop building and related facilities for servicing diesel locomotives at Clifton Forge, Va. ($781,000); point-to-train and end-to-end radio communication facilities from Parsons, Ohio, to Toledo ($440,000); 18,052 ft. of track to serve Ford Motor Company plant at Livonia, Mich., ($138,500); purchase of roadway machines and trucks for maintenance of way on Pere Marquette district ($118,400), of truck crane ($22,000). and of McWilliams multiple tamper ($31,000); additional yard tracks at Paintsville, Ky. ($98,700); automatic short-arm gates with flasher light signals at three grade crossings, St. Albans, W. Va. ($66,300), and also at Dayton, Ky. ($63,400); replace single- with three-channel telephone system between Huntington, W. Va., and Russell, Ky., and relocate single-channel system, Russell to Covington, Ky. ($55,000); track changes because of flood wall construction, Ashland, Ky. ($50,000); relocate track over bridge No. 339A, Irwin, Va. ($36,400); repairs and additions to bulkhead wall of Slip Dock, Detroit ($40,800); improve roadway into steel car shop, Russell, Ky. ($31,400); improvements to drainage system, Augusta, Ky. ($30,000); replace bridge 1650 with ballast deck frame trestle, Peru, Ind. ($27,600); addition to storehouse at Pier 14, Newport News, Va. ($23,000); construct 2,986 ft. of passing track and 148 ft. of freighthouse track, Wallaceburg, Ont. ($22,700); and track changes at coal mine, Holden, W. Va. ($20,900).

Chicago & Illinois Midland. — Current construction projects represent an expenditure of $609,875. The largest scheduled for 1952 is the replacement of an open-deck pile and frame trestle, about two miles north of Oakford, Ill., with a ballasted deck pile and frame trestle including three fire protection sections. The total cost has been estimated at $236,955, but the 1952 program calls for only a portion of the job at $156,065. At Ellis, construction of new yard tracks to serve Mine No. 10 of the Peabody Coal Company will involve a total expenditure of $345,735, of which $53,700 is scheduled for this year. At Taylorville, construction of Kinney yard to serve Peabody's Mine No. 11 will involve a total expenditure of $750,000, of which $107,410 will be undertaken in 1952. Construction of an overpass with U.S. Route 66 east of Cimic (a $541,700 project) will entail a $33,450 expenditure by the C.&I.M.

Company forces are converting dispatching circuits throughout the system from telegraph to telephone at a cost of $20,000. Standby power for train order signals is being provided throughout the system at a cost of $10,250. At the Springfield shops, the Evans Construction Company is building a new office for the superintendent of motive power and equipment at a cost of $40,000. In connection with the rebuilding of Bridge 830, concrete piers are to be constructed and necessary steel ordered at a cost of $90,000. A wheel lathe in the car department at Taylorville shops will be replaced at a cost of $99,000.

FINANCIAL

Baltimore & Ohio.—*Alton Bondholders Sue.*—Certain bondholders of the bankrupt Alton have filed suit in the federal district court in New York against the Baltimore & Ohio, seeking $45 million damages on the ground of alleged mismanagement during the period 1931-1942 when the Alton was under B & O. control.

Boston & Maine.—*Securities Modification.*—The I.C.C. has decided to hold new hearings in connection with this road's Mahaffie-Act stock modification plan. The commission reopened the case after a minority stockholder raised questions about how the road obtained stockholder approval for the plan. The stockholder, Mabel Benson Sakis, questioned the validity of assents reported to the commission, the accuracy and validity of certifications made by the road, and the methods used by the road, and its agents, to obtain and report assents and revocations of stockholders. The new hearing will be limited to these points.

Meanwhile, the commission's order of January 23, 1951, which gave final approval to the stock modification plan, is being held in abeyance. This commission approval was given after a majority of B.&M. stockholders allegedly assented to the plan. The Sakis stockholder group took the case to court, where new evidence was introduced and the court suggested that the matter be taken back to the commission for further study. (*Railway Age*, March 3, page 81.)

Elgin, Joliet & Eastern.—*New Directors.*—P. T. Moran, vice-president, and W. G. Mateer, manager of purchases and stores, have been elected members of the board of directors. Mr. Moran, previously general manager, was elected vice-president at the same time.

New York, Susquehanna & Western.—*Reorganization.*—The I.C.C. has aproved payment of $16,000 a year to the law firm of Lum, Fairlee & Foster, counsel for the trustee of this road.

New Securities

Application has been filed with the I.C.C. by:

CENTRAL OF GEORGIA.—To assume liability for $2,325,000 of series W equipment trust certificates, to finance in part 21 diesel-electric locomotive units costing an estimated $2,912,774. The equipment is as follows:

	Description and Builder	Estimated Unit Cost
6	1,200-hp. switchers (Electro-Motive Division, General Motors Corporation)	$105,042
14	1,600-hp. road-switchers (American Locomotive-General Electric Companies)	151,494
1	1,600-hp. road-switcher (Alco-G.E.)	161,606

The certificates, dated May 1, would mature in 15 annual installments of $155,000 each, beginning May 1, 1953. They would be sold by competitive bidding, with the interest to be set by such bids.

CHESAPEAKE & OHIO.—To assume liability for $9,300,000 equipment trust certificates to finance in part acquisition of equipment, listed below, which is expected to cost $11,765,935.

	Description and Builder	Estimated Unit Cost
9	1,600-hp. diesel electric road switching locomotive units (American Locomotive-General Electric Companies)	$185,235
985	70-ton hopper cars (American Car & Foundry Co.)	5,729
398	70-ton hopper cars (Pullman-Standard Car Manufacturing Company)	7,077
275	50-ton box cars (Pullman-Standard)	5,832

The certificates, dated June 1, would mature in 30 semiannual installments of $310,000 each, beginning December 1. They would be sold by competitive bids which would fix the interest rate.

ILLINOIS CENTRAL.—To issue and sell $25,000,000 of series D consolidated mortgage bonds, proceeds from whi-h would be used to redeem other bonds maturing in 1952-53 and 1955 (*Railway Age*, April 21, page 75). The I.C.C. has already authorized the I.C to negotiate for private sale of the new bonds, and seven insurance companies have agreed to purchase them. The bonds would be dated June 1, 1952, mature in 30 years, and bear interest at 4½ per cent. Sale of these bonds would free funds for capital expenditures over the next three years, the road said.

Division 4 of the I.C.C. has **authorized:**

MISSOURI PACIFIC.—To assume liability for $2,700,000 of series SS equipment trust certificates, to finance in part 14 diesel-electric locomotive units and three planetarium cars costing an estimated $3,387,056. (*Railway Age*, April 21, page 76). Division 4 approved sale of the certificates for 99.42 with interest at 3 per cent —the bid of Halsey, Stuart & Co. and three associates—which will make the average annual cost of the proceeds to the road approximately 3.11 per cent. The certificates, dated May 1, will mature in 15 annual installments of $180,000 each, beginning May 1, 1953. They were reoffered to the public at prices yielding from 2.15 to 3.15 percent, according to maturity.

Dividends Declared

CLEVELAND & PITTSBURGH.—4% guaranteed, 50¢, quarterly; 7% guaranteed, 87½¢, quarterly both payable June 2 to holders of record May 9.

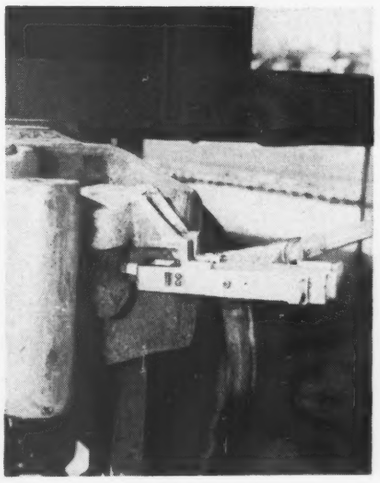
SOUTHERN.—$1, quarterly, payable June 14 to holders of record May 15.

Security Price Averages

	May 6	Prev. Week	Last Year
Average price of 20 representative railway stocks	59.59	59.73	57.44
Average price of 20 representative railway bonds	93.00	93.43	95.32

Tabular summaries of annual reports of 28 Class I railroads appear on page 88 and a table of Selected Income and Balance Sheet Items of Class I railways for January 1952 appears on page 90.

The aluminum compressed air "gun" for inserting the pegs in the couplers is light enough to be handled easily, and long enough for perfect safety.



A guide on the end of the gun, designed to the exact dimensions of a standard coupler, ensures proper placement of the pegs.

WHY COUPLERS STAY OPEN WHEN THE SOUTHERN HUMPS CARS

Patent Applied For

Closing when they should remain open, coupler knuckles were slowing the work of yard crews making up trains from cuts of cars in the John Sevier hump yard of the Southern at Knoxville, Tenn.

To reduce the problem to the simplest terms, consider this three-car example. With a hopper car already standing in a classification track, a box car released at the hump rolls down into the same classification track. Slowed a little too much in the retarder, it hasn't the momentum to roll all the way to the hopper car and couple. Then a gondola car rolls off the hump into the same classification track and couples to the box car. The slight impact causes the forward coupler knuckle of the box car to partially close.

When a yard engine gives the cut of cars the customary forward shove to make all the couplings before pulling cars to the forwarding yard, the partially closed coupler of the box car will not engage the coupler of the car next to it. One of the yard crew has to walk the track to make the coupling by hand.

Operating men had to come to grips with the problem. Apparently, the answer would have to be something that would hold the coupler knuckle open until the actual movement of contact with another coupler, yet would not hinder the coupling of the cars in any way.

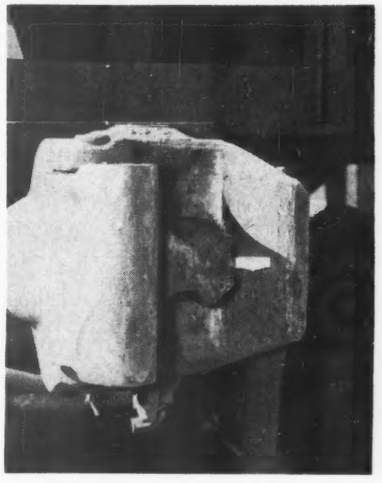
D. W. Brosnan, vice-president—Operation, then general manager at Knoxville, suggested a small peg to hold the coupler open and a long handled gun to insert the peg as cars were shoved up to the hump. John Sevier shop turned out a light aluminum gun, using compressed air to drive in the triangular peg and a guide designed to the exact inner dimensions of a standard coupler to ensure proper placement of the peg.

Experiments with different kinds of pegs resulted in the choice of half-inch-thick Celotex. Thick enough and firm enough to hold a coupler open, it could be crumpled between a man's fingers and was easily crushed when couplers came together.

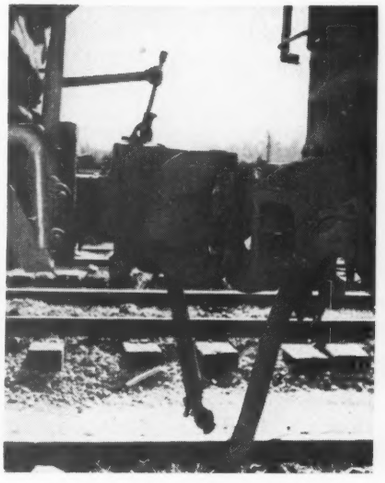
The compressed air gun has two trigger buttons on the handle—one to fire the piston and the other to recock it—make the gun convenient to use (though it has to be reloaded with a peg before each "shot"). Its light weight makes for easy handling. Its long handle permits the car inspector to insert the wedge in the coupler while standing in the clear.

A new building constructed near the crest of the hump provides a base of operation for car inspectors who "peg" couplers and a place to store supplies of pegs. An overhead frame beside the track holds the compressed air tank and the movable slings that support the air hose. A patent has been applied for on the device.

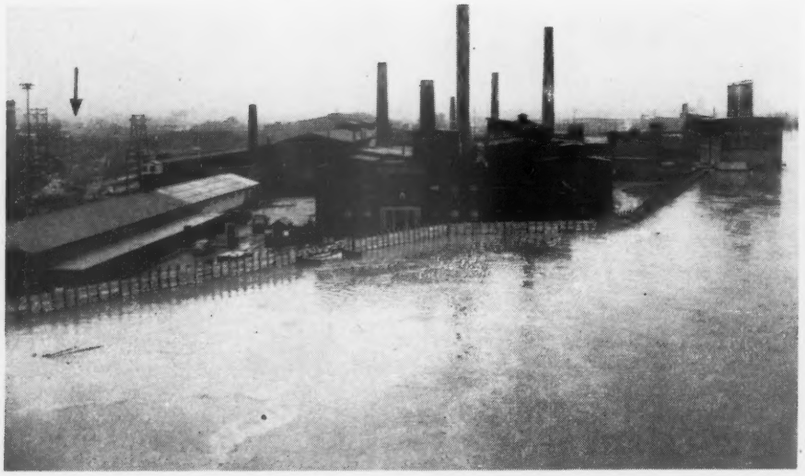
—This story is reprinted in condensed form, by permission, from the April issue of Ties, the Southern's employee magazine.



The half-inch Celotex pegs are firm enough to hold a coupler open . . .



But are easily crushed by the impact when couplers come together.



A TENSE CITY WAITED as waters of the Missouri river—here shown 11 feet over flood stage—lapped at temporary flashboarding erected atop Omaha's concrete flood wall. Note the diesel switcher and crewmen far below the water line in yard at the left.

A UNION PACIFIC EMPLOYEE, using one of 34 "walkie talkies" assigned to flood control service, calls in from a levee station for more material.

HIS CALL IS RECEIVED in the control center located in the office of the U.P.'s chief engineer, W. C. Perkins. Here two radio operators confer over map before arranging for dispatch of emergency crew and materials. This nerve center of the flood battle operated 24 hours a day for more than a week.

OFF TO THE WEAK SPOT go trucks with men and sandbags just a few moments later. Thousands of volunteers worked on the project.

RAILROAD RADIO SAVES TWO CITIES

The radio communications system of the Union Pacific has been cited as one of the major factors that enabled men and materials to hold the swollen Missouri river back from the low-lying sections of Omaha, Neb., and Council Bluffs, Iowa.

Working 24 hours a day for more than a week, Union Pacific "walkie talkie" equipment, manned largely by the road's own communications people, maintained a constant patrol of threatened dikes, calling for men, sand and machines as weak spots appeared. So vital was this communications network, centered in the office of the chief engineer, W. C. Perkins, that the limited supply of portable units was later augmented by 20 Motorola units purchased by the city of Omaha. To rush these units to the flood, Motorola's Chicago plant worked 18 hours a day grinding crystals to match the frequency of the U.P.'s equipment.

Mr. Perkins was made a member of the steering committee which directed the flood fight in the two cities. A radio receiver to monitor the network of the army engineers was also placed in his office. Thus all trouble spots along the miles of dikes and floodwalls were in constant and direct communication with this office and with central headquarters of the steering committee in the city hall at Omaha, where another station had been set up. Other stations were operated from the office of the U.P.'s terminal superintendent and the road's radio car. It was in this car that all the network's units were maintained.

At the height of the flood, 34 portable units and three automobile units kept the steering committee in constant touch with dike conditions. Twenty-one of the units were in the hands of booted men—many of them U.P. employees—who slogged over the mud-soaked levees patrolling for trouble spots. Three portable units were in the hands of U.P. engineers and Omaha's fire commissioner, who drove their cars from threatened point to threatened point. The mobile units were in similar service, while the remaining 10 portable units were in the hands of army engineers for monitoring the civilian patrol. All were 160.29 megacycles.

A stringent test for the network came when the waters were cresting and an exploded sewer spewed vast quantities of water into an industrial district. Within 10 minutes three portable and two mobile units were at the site to direct a night-long struggle, ultimately victorious.

Emblem of dependable performance . . .

Pressed Steel Car Company has proven its dependability during 54 years of producing safe, efficient and economical freight cars.

The P.S.C. trademark, now appearing on all cars coming off the assembly line, is your guarantee that every manufacturing science has gone into their construction.

Pressed Steel Car engineers, ever progressive, always in the forefront, have initiated new designs, and stressed the importance of improved car construction to provide greater all around performance.

Pressed Steel Car has exemplified its pioneering leaderships with "firsts" beginning in 1897—the year of the first all steel hopper car—to the present day revolutionary Unicel freight car. Its advanced engineering is always striving to make better the car designs that will lift American transportation to new heights of efficiency.

MEMO

W.M. —

Our sincerest congratulatio to the Western Maryland fami on their 100th Anniversary. Only the best during the next century —

PSC

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Telephone ANdover 3-6554

RAILWAY OFFICERS

EXECUTIVE

Robert J. Marks, assistant vice-president of the LOUISIANA MIDLAND at Baton Rouge, La., has been appointed vice-president in charge of traffic, succeeding the late **C. W. Moffett.**

C. S. Blackman has been elected vice-president, traffic, of the TENNESSEE CENTRAL at Nashville, Tenn. He was former traffic manager.

Philip N. Myers, president of the MCCLOUD RIVER, has been named president and director of the TRONA, as was reported by *Railway Age* on April 7. Mr. Myers entered railroad service in 1915 as warehouseman and stenographer for the Southern Pacific. After

Philip N. Myers

serving a year in the armed forces during World War I, he held various clerical positions with Mack Truck Distributors, the Atchison, Topeka & Santa Fe, and the International Harvester Company. In 1930 he was appointed auditor for the McCloud River, and in 1935 was also appointed assistant superintendent. He was subsequently appointed superintendent, still retaining the position of auditor. In 1943 he was named vice-president and general manager, since 1949 has been president, treasurer and general manager.

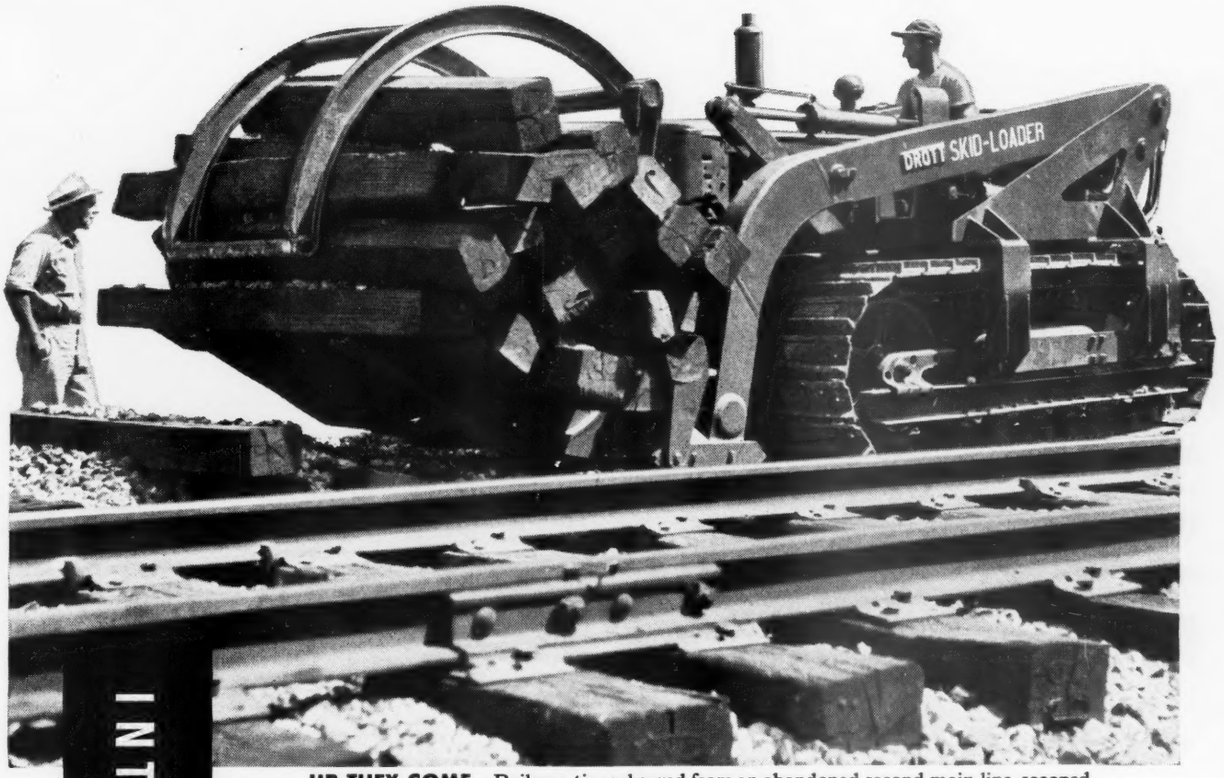
J. F. McCook, whose appointment as assistant to vice-president of the NEW YORK CENTRAL at Chicago was reported by *Railway Age* on April 7, joined the Central in 1924 as a junior engineer in New York. From 1925 to 1934 and again in 1937, he was an engineer on the Central's West Side improvement project in New York. From 1934 to 1936 he was an engineer on the grade crossing elimination project in Syracuse, N.Y. In 1941 he worked on a crossing elimination project at Herkimer, N.Y., and in 1943 was assigned to Cleveland to super-

ANNUAL REPORTS

Railroad		Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Atlanta & West Point	1951	$4,573,561	$3,681,685	25,223	$264,126	$2,459,420	$1,085,032	$989,600
	1950	4,376,909	3,399,767	14,845	274,601	2,667,449	1,225,337	555,400
Belt of Chicago	1951	13,754,636	8,985,674	1,690,300	185,921	4,800,798	2,698,208	4,039,676
	1950	12,959,665	7,887,079	1,710,903	184,838	5,974,403	3,919,088	2,933,597
Central of Georgia	1951	42,778,392	36,988,784	730,095	1,318,421	13,782,265	6,402,439	33,859,891
	1950	39,060,944	33,381,898	591,542	1,626,257	15,243,576	6,088,933	30,077,575
Charleston & Western Carolina	1951	6,427,161	5,071,393	354,871	496,232	2,068,707	1,450,069	10,527,984
	1950	4,909,912	3,902,867	284,882	219,062	2,027,380	1,052,055	7,969,161
Chicago & Eastern Illinois	1951	33,659,040	25,859,332	994,664	1,795,201	10,030,663	7,320,623	35,156,745
	1950	30,577,220	21,944,993	896,492	2,658,418	10,362,602	6,797,142	36,940,255
Chicago & Illinois Midland	1951	9,383,019	6,395,016	154,817	990,961	5,562,294	2,433,356	2,600,000
	1950	10,462,727	5,701,891	166,395	1,945,856	6,652,609	3,237,880	3,050,000
Chicago & North Western	1951	203,477,012	178,354,340	2,715,331	3,254,229	57,373,532	39,343,217	184,113,959
	1950	188,901,154	159,315,388	2,859,611	6,606,859	58,597,079	43,041,196	177,472,669
Detroit, Toledo & Ironton	1951	18,517,048	11,613,980	392,934	2,567,967	9,086,331	5,585,915	16,332,537
	1950	17,939,733	10,121,009	359,778	3,232,703	9,548,344	5,833,541	14,148,231
Duluth, Missabe & Iron Range	1951	56,654,950	38,649,475	331,959	4,516,948	18,496,937	20,281,118	13,452,000
	1950	46,176,305	28,956,504	361,089	6,286,372	15,086,173	16,781,364	14,904,000
Georgia	1951	9,685,264	7,520,973	654,951	1,208,198	3,990,922	1,548,278	14,232,184
	1950	8,766,717	6,645,420	630,089	1,319,934	4,295,780	1,254,857	13,575,414
Green Bay & Western	1951	4,017,702	2,918,377	153,448	382,962	1,385,883	886,230	8,323,011
	1950	3,816,275	2,534,897	28,611	576,583	1,459,817	866,341	8,205,874
Louisville & Nashville	1951	226,475,040	173,992,163	7,969,547	22,788,103	81,444,791	42,757,598	238,846,536
	1950	203,016,524	150,684,793	7,440,903	24,308,261	93,140,479	42,022,782	222,673,413
Midland Valley	1951	2,103,836	1,667,244	138,325	105,397	1,487,725	610,883	4,452,500
	1950	2,051,175	1,504,187	196,497	127,442	1,569,466	768,486	4,752,500
Minneapolis & St. Louis	1951	21,893,507	16,474,046	153,469	1,663,786	6,472,521	5,231,926	6,282,553
	1950	20,881,599	15,008,925	147,917	2,765,248	6,632,737	5,506,119	6,041,081
Minneapolis, St. Paul & Sault Ste. Marie	1951	41,485,775	35,049,891	50,859	1,867,537	18,765,262	10,640,877	23,037,212
	1950	38,369,978	31,286,206	22,911	1,544,969	19,789,235	10,454,025	22,140,026
Monongahela	1951	9,007,983	5,495,237	493,869	405,199	2,005,749	1,717,833	9,772,000
	1950	6,184,845	4,086,570	494,307	91,267d	1,225,807	1,101,838	9,772,000
Nashville, Chattanooga & St. Louis	1951	38,475,942	28,668,149	1,714,979	3,755,309	18,587,711	7,179,593	29,207,116
	1950	35,798,615	25,819,250	1,653,914	3,890,621	17,821,129	7,244,836	28,639,529
New York, Susquehanna & Western	1951	5,415,831	4,053,998	640,352	3,783d	3,513,694	1,776,122	13,655,740
	1950	5,110,476	3,771,288	631,761	114,546	4,203,669	2,325,001	13,151,992
Pennsylvania	1951	1,044,387,274	892,945,689	68,817,997	26,697,716	316,389,224	154,517,474	785,443,499
	1950	930,140,874	784,527,563	70,732,253	38,420,677	311,041,166	156,357,265	706,232,699
Pittsburgh & West Virginia	1951	8,702,142	7,140,152	494,675	723,099	5,083,816	2,101,582	12,179,428
	1950	8,484,259	6,635,663	502,109	1,296,582	4,408,609	1,223,927	12,102,900
Richmond, Fredericksburg & Potomac	1951	27,669,138	17,442,937	179,044	3,661,298	12,660,492	6,989,183	5,911,602
	1950	23,991,601	15,048,208	230,063	3,832,597	10,033,778	5,788,406	6,577,439
Rutland	1951	5,828,375	5,436,512	23,640	205,096d	1,310,233	669,673	1,026,450
	1950	5,641,359	5,312,474	337,044	515,763d	1,568,783	741,116	7,161
Sacramento Northern	1951	3,447,312	2,296,869	851,088	94,906d	3,527,608	1,430,314	29,168,144
	1950	3,117,805	1,937,288	851,164	53,221d	3,701,148	2,443,234	28,355,093
Spokane International	1951	2,615,443	1,832,845	38,090	335,716	1,207,329	810,056	3,561,725
	1950	2,321,062	1,486,831	28,272	406,056	1,463,713	822,640	3,322,715
Toronto, Hamilton & Buffalo	1951	6,358,549	3,149,620	99,335	1,659,237	6,364,054	2,569,455	3,400,000
	1950	5,151,662	2,990,769	90,830	1,344,798	5,013,504	2,560,212	3,600,000
Union Pacific	1951	505,197,760	375,470,619	5,799,406	68,865,351	216,903,076	124,664,735	204,453,789
	1950	465,283,516	327,651,611	5,944,600	69,761,549	218,880,119	122,800,250	215,396,183
Western Maryland	1951	47,724,914	33,591,708	2,849,764	5,537,026	17,394,085	12,511,275	69,452,990
	1950	41,874,602	28,621,231	2,809,084	5,368,368	17,734,358	13,346,781	58,979,865
Western of Alabama	1951	4,585,763	3,536,903	80,623	371,798	3,270,926	985,798	1,980,700
	1950	4,362,864	3,267,049	79,015	648,226	3,235,402	1,013,945	2,111,500

* On December 31
d Deficit

Lifts Ties like Matches



UP THEY COME—Railway ties salvaged from an abandoned second main line, scooped up from the slag ballast, gathered together in bundles by the remarkable one-man unit.

International crawler with new skid loader scoops up ties from 60 miles of Southern track

When the Southern Railway installed centralized traffic control on one division recently, it became possible to remove 60 miles of rails from second main-line track. Then the Southern wondered how to recover 180,000 ties from the same section.

They found that when it comes to salvaging ties, there's nothing made to match the new skid loader mounted on a rugged International crawler.

A TD-14A crawler with skid loader was put to work, scooping up the ties with reinforced skids, and holding them secure with the machine's claw-like top grab arm. The bundles of from 20 to 25 ties were banded with steel tape from special tape reels mounted on the skid loader frame.

Result: 2,900 ties dug up and tied in bundles each 8-hour day.

The tractor skid loader outfit is a natural for materials handling. See your International Industrial Distributor, and put International *"Power that Pays"* to work for you!

INTERNATIONAL HARVESTER COMPANY, CHICAGO 1, ILLINOIS

INTERNATIONAL

INTERNATIONAL HARVESTER

POWER THAT PAYS

vise construction of the coal dock and Dilly Road locomotive facility. He became assistant division engineer at

J. F. McCook

Chicago in 1945 and division engineer at Detroit in 1946. He was appointed division engineer at Chicago in 1948.

Russell L. Snodgrass, vice-president in charge of finance of the BALTIMORE & OHIO at Baltimore, has resigned to engage in the private practice of law. Mr. Snodgrass was born in Young's Cove, N.B., Canada, on August 4, 1898, and received his B.A. degree from the University of New Brunswick in 1918, an LL.B. degree from Dalhousie University at Halifax, N.S., in 1925 and his S.J.D. from Harvard University in 1926. He served with the Canadian Expeditionary Force in 1918-1919, then in Canadian schools until 1923. Mr. Snodgrass became a

Russell L. Snodgrass

citizen of the United States in 1931, was admitted to the New York Bar in 1932, and later to the bar of the Supreme Court of the United States. He engaged in the private practice of law from 1926 to 1932 at New York and in the latter year he joined the legal staff of the Reconstruction Finance Corporation, serving as assistant general counsel from 1935 to 1942. Mr. Snodgrass joined the B. & O. on September 1, 1942 as vice-president in charge of finance.

FINANCIAL, LEGAL & ACCOUNTING

Oliver M. Hepler, comptroller of the CHESAPEAKE & OHIO at Richmond, Va., has retired after 45 years of service. Mr. Hepler was born in Surrey County, N. C., on April 22, 1887, and joined the C. & O. as a stenographer-clerk in the comptroller's office at Richmond in 1907. He served successively as chief clerk, assistant to

Oliver M. Hepler

Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

Income Items	United States For the month of January 1952	1951
1. Net railway operating income	$66,066,879	$78,950,804
2. Other income	17,995,189	19,732,780
3. Total income	84,062,068	98,683,584
4. Miscellaneous deductions from income	4,460,742	4,505,435
5. Income available for fixed charges	79,601,326	94,178,149
6. Fixed charges:		
6-01. Rent for leased roads and equipment	9,382,103	9,806,035
6-02. Interest deductions[1]	25,701,109	24,825,788
6-03. Amortization of discount on funded debt	225,656	216,397
6-04. Total fixed charges	35,308,868	34,848,220
7. Income after fixed charges	44,292,458	59,329,929
8. Other deductions	2,929,375	3,035,152
9. Net income	41,363,083	56,294,777
10. Depreciation (Way and structures and Equipment)	38,891,509	37,470,668
11. Amortization of defense projects	.....	.....
12. Federal income taxes	46,242,662	56,888,588
13. Dividend appropriations:		
13-01. On common stock	5,469,706	6,147,434
13-02. On preferred stock	7,086,658	6,595,882
Ratio of income to fixed charges (Item 5 ÷ 6-04)	2.25	2.70

Selected Expenditure and Asset Items	United States Balance at end of January 1952	1951
17. Expenditures (gross) for additions and betterments—Road	$24,558,935	$22,692,227
18. Expenditures (gross) for additions and betterments—Equipment	92,930,009	67,316,885
19. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	476,971,745	471,116,081
20. Other unadjusted debits	109,557,288	101,377,243
21. Cash	843,035,584	950,279,743
22. Temporary cash investments	898,389,765	1,036,055,372
23. Special deposits	66,033,947	125,268,289
24. Loans and bills receivable	1,393,900	1,674,746
25. Traffic and car-service balances—Dr.	59,359,040	63,755,910
26. Net balance receivable from agents and conductors	158,933,990	155,778,597
27. Miscellaneous accounts receivable	468,395,855	466,664,139
28. Materials and supplies	923,820,872	757,463,120
29. Interest and dividends receivable	13,437,897	12,788,954
30. Accrued accounts receivable	221,285,670	228,092,355
31. Other current assets	35,601,829	38,606,835
32. Total current assets (items 21 to 31)	3,689,688,349	3,836,428,060
Selected Liability Items		
40. Funded debt maturing within 6 months[2]	$185,528,743	$146,013,170
41. Loans and bills payable[3]	3,235,833	1,755,500
42. Traffic and car-service balances—Cr.	94,529,255	97,535,200
43. Audited accounts and wages payable	546,050,356	533,748,063
44. Miscellaneous accounts payable	190,158,651	239,415,538
45. Interest matured unpaid	30,878,880	32,103,470
46. Dividends matured unpaid	10,717,968	7,261,807
47. Unmatured interest accrued	83,517,610	82,453,866
48. Unmatured dividends declared	24,554,955	22,108,715
49. Accrued accounts payable	266,788,827	213,305,334
50. Taxes accrued	929,389,242	975,980,094
51. Other current liabilities	88,588,700	92,703,836
52. Total current liabilities (items 41 to 51)	2,268,410,277	2,298,371,423
53. Analysis of taxes accrued:		
53-01. U. S. Government taxes	772,489,795	827,698,601
53-02. Other than U. S. Government taxes	156,899,447	148,281,493
54. Other unadjusted credits	299,156,489	276,845,125

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.
[3] Includes obligations which mature not more than one year after date of issue.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.
Subject to revision.

We Congratulate the

WESTERN MARYLAND Railway 100th Anniversary 1852-1952

on its FIRST CENTURY of
Progress and Fine Service.

Over a Period of Many Years
Our Business Relations with Your
Company Have Been Very Pleasant.

ILLINOIS RAILWAY EQUIPMENT COMPANY
80 East Jackson Boulevard
Chicago 4, Illinois

We Salute
THE
WESTERN MARYLAND

WESTERN MARYLAND Railway 100th Anniversary 1852-1952

May you and the territory you have served so well continue to grow and prosper!

RAILROAD SUPPLY AND EQUIPMENT, INC.
Exclusive Distributors to the Railroads
Amesteam Generator • Hypressure Jenny
Utica Magnesium Step Box • Lee Space Heater
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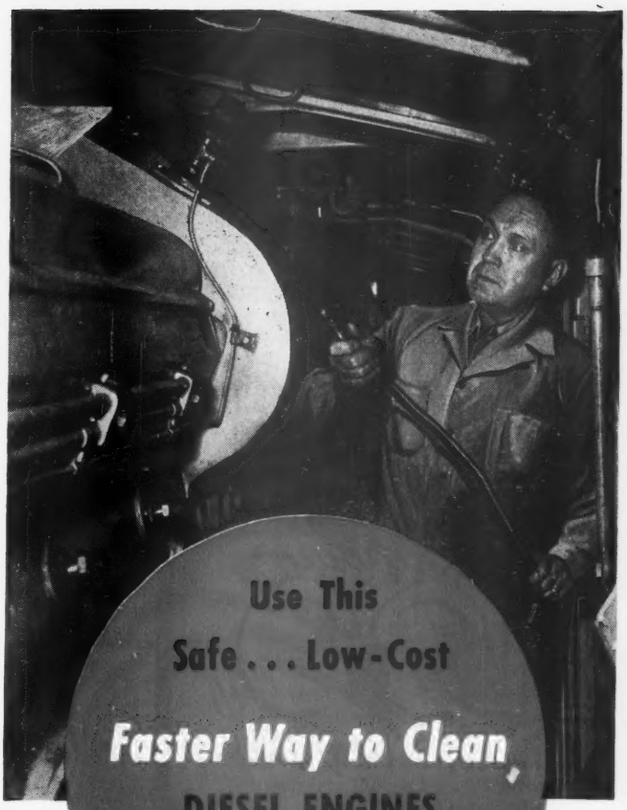


Inspection and Repair by Electrical Maintenance Force Expedited by Oakite Method

WHEN you remove coatings of oil and grime from painted surfaces of Diesel engines, dials, controls and other equipment, you provide the CLEAN surfaces that expedite inspection and repair at terminals and maintenance shops by electrical forces. And that is why many leading roads specify OAKITE RENOVATOR for this work. It is safe to use, safe on painted surfaces. Can be applied with pressure spray. Or by hand. No rinsing! You merely wipe dry with cloth. A 4-page Bulletin gives further details. Write.

OAKITE PRODUCTS, INC., 46 Thames Street, NEW YORK 6, N. Y.
In Canada: Oakite Products of Canada, Ltd. 65 Front St. East, Toronto, Ont.

OAKITE
RAILWAY SERVICE DIVISION

comptroller and assistant comptroller at Richmond. In 1946 Mr Hepler was appointed comptroller at Cleveland, transferring to Richmond in 1951.

A. W. Richmond, assistant auditor of claims of the CANADIAN PACIFIC, has been appointed auditor of claims, with headquarters as before at Montreal, succeeding **Frederick Elder** of Winnipeg, who has retired on pension after 45 years of service. **G. P. Connolly,** of Montreal, who has been with the railway since 1915, succeeds Mr. Richmond, but with headquarters at Winnipeg.

H. J. Kihn, assistant auditor of freight accounts for the SOUTHERN PACIFIC at San Francisco, has been appointed auditor of freight accounts succeeding **Percy H. Todd,** who has retired. Mr. Kihn joined the S.P. in 1920 as a clerk in the accounting department. He was named special accountant in 1936 and a year later became assistant auditor of freight accounts.

Congratulations

WESTERN MARYLAND . . .

on your 100 years of enterprise and progress. May you enjoy continued success in the years to come.

We are proud that Magnus cleaning compounds and cleaning machines are a part of your excellent diesel maintenance program.

Photo above shows the Magnus Equipped Diesel Parts and Filter Cleaning shop of the Western Maryland Railway.

Magnus CLEANERS

MAGNUS CHEMICAL CO., INC.
Garwood, New Jersey

OPERATING

Charles H. Youst, superintendent of the DELAWARE, LACKAWANNA & WESTERN assigned to special duties at Hoboken, N.J., retired on May 1. Mr. Youst was born at Glover's Gap, W. Va., and learned telegraphy as a boy of 12 by listening to the Morse instrument in the local station of the Baltimore & Ohio. His first railroad employment was as a switchman on the B.&O. at Mannington, W. Va., where he later advanced to yardmaster. He joined the Lackawanna on October 1, 1907, as yardmaster at Scranton, Pa., and subsequently served as general yardmaster at Port Morris, N.J., and Elmira, N.Y., and as terminal trainmaster and road trainmaster at Buffalo. On August 1, 1942, Mr. Youst was furloughed to enter government service as head of the Office of Defense Transportation at Buffalo. In that capacity he directed transportation of war materials originating in that area adjacent to the Great Lakes, including the Niagara Frontier, between Detroit and the Hudson river, and transportation of oil by rail through Canada. Mr. Youst was appointed superintendent of the Lackawanna's Buffalo division at Buffalo on January 1, 1944, which position he held until his transfer to Hoboken on special assignment on March 1, 1950.

George Meldrum, superintendent of the Lethbridge division of the CANADIAN PACIFIC, has been transferred to the Medicine Hat division, succeeding **F. J. Malone,** who has retired. **A. M. Fraser,** acting superintendent of the Moose Jaw division, succeeds Mr. Meldrum. Mr. Fraser is succeeded by **C. F. Gwyn,** assistant superintendent of the Moose Jaw division. **J. L. Hall,** assistant superintendent at Edmonton, Alta., has been transferred to Calgary, Alta. **F. G. Smyth,** assistant superintendent at Medicine Hat, Alta., has been transferred to Bassano, Alta. **R. F. P. Bowman,** assistant superintendent at Bassano, succeeds Mr. Smyth. **W. E. Brookwell,** assistant superintendent at Calgary, succeeds Mr. Hall. **C. C. Whiteman,** general yardmaster at Moose Jaw, has been promoted to acting assistant superintendent at the same point.

Mr. Fraser had served as assistant superintendent at Regina, Sask., and at Weyburn, before his promotion to acting superintendent at Moose Jaw in February of this year.

Julius H. Jordan, special representative in the office of vice-president and general manager, Pere Marquette district of the CHESAPEAKE & OHIO, has retired after 43 years of service.

J. Smyth, terminal trainmaster of the CANADIAN NATIONAL at Windsor, Ont., has been promoted to assistant superintendent of the Hornepayne division at Hornepayne, Ont., succeeding **G. H. Sanderson,** who has been

(Continued on page 97)

(Continued from page 92)
transferred to the Capreol division at Capreol, Ont. Mr. Sanderson succeeds **W. S. Gleason,** who has been transferred to the Allandale division at Allandale, Ont., succeeding **A. E. McCullough,** appointed transportation assistant of the Northern Ontario district at North Bay.

H. J. Surles, trainmaster for the GREAT NORTHERN at Spokane, Wash., has been appointed general safety supervisor, succeeding **C. L. LaFountaine.**

A. J. Sheehy, assistant superintendent of the Saratoga-Champlain division of the DELAWARE & HUDSON at Plattsburgh, N.Y., has been promoted to superintendent of that division at Albany, succeeding **K. E. Miller,** whose appointment as general superintendent of transportation was reported in *Railway Age* April 28, page 63. Mr. Sheehy also succeeds Mr. Miller as superintendent of the GREENWICH & JOHNSONVILLE. **C. E. R. Haight,** division engineer of the Saratoga division at Albany, has been appointed assistant superintendent of the Saratoga-Champlain division, succeeding Mr. Sheehy.

TRAFFIC

Thomas M. Holland, district freight agent of the CANADIAN PACIFIC at Pittsburgh, has been appointed general freight agent at New York, succeeding **D. C. MacDonald,** who retired because of ill health. Mr. Holland was born in New York in 1896 and served for about five years with the Indiana Harbor Belt before joining the C.P. as traveling freight agent at Chicago in 1920. He has had particular experience in the handling of steel and grain, and had served as district freight agent at Chicago, prior to going to Pittsburgh.

Joseph P. Jolley, commercial agent of the SOUTHERN, has been appointed district freight and passenger agent at Fort Lauderdale, Fla., in charge of the road's newly established agency there. **W. Kenneth Bien,** commercial agent at Kansas City, has been appointed general agent at that point.

Joel S. Cagle has been appointed general agent of the NORFOLK SOUTHERN at Greensboro, N. C., succeeding **G. Lee Howerton,** appointed assistant division freight agent at New Bern, N. C. **Roland H. Watson** has been appointed commercial agent at Raleigh, N. C., succeeding **Robert L. Howard,** appointed assistant division freight agent at Charlotte, N. C. Mr. Howard succeeds **Leonard H. Shockley,** who has been promoted to commercial agent at Richmond, Va. **Frank P. Slavin** and **Douglas R. Elder** have been appointed commercial agents at Cincinnati and Chicago, respectively.

Ray I. Nova has been appointed general agent of the RUTLAND at Chicago, effective May 5.

Wilfred E. Merchant, chief pass clerk of the CANADIAN PACIFIC, has been appointed chief of the pass bureau, with headquarters as before at Montreal, succeeding **E. Hodgskin,** deceased.

Henry C. Hoffman, commercial agent of the LEHIGH VALLEY at Rochester, N.Y., has been appointed division passenger agent at Ithaca, N.Y., effective May 1, succeeding the late **Leo J. Sullivan.**

As *Railway Age* reported April 28, **William J. Rodgers** has been named passenger traffic manager of the GULF, COLORADO & SANTA FE at Galveston, Tex., succeeding the late **A. C. Ater.** Mr. Rodgers entered Santa Fe service in 1917 as ticket clerk at Topeka, Kan. He was appointed city passenger ticket

William J. Rodgers

agent and division passenger agent, serving in the latter capacity at Topeka and Oklahoma City, Okla. He was appointed general agent, passenger department, at Kansas City, Kan., in 1950, and received his recent promotion while serving in that position.

William D. Gordon, division freight agent of the PENNSYLVANIA at Grand Rapids, Mich., has been promoted to division freight agent-special duty, at Philadelphia. He is succeeded at Grand Rapids by **Charles A. Fitzson,** district freight agent at Trenton, N. J. **Harvey M. Johnson, Jr.,** district freight agent at Scranton, Pa., has been transferred to Dayton, Ohio, succeeding **Lindsay O. Holt,** who has been transferred to Trenton.

Donald W. Wicks, assistant district passenger agent, Oakland (Cal.) district of the SOUTHERN PACIFIC, has been transferred to San Francisco, succeeding **Joseph B. Haggerty,** recently promoted to district passenger agent. **Jack Roche,** supervisor of solicitation and rates, succeeds Mr. Wicks.

R. J. Grant has been appointed general agent for the CHICAGO & EASTERN ILLINOIS at Portland, Ore., and the position of commercial agent has been abolished. **W. F. Moeller** has been appointed general agent at New Orleans, La., succeeding **W. C. Sullivan,** resigned.

J. B. Sullivan, cashier and chief clerk for the CANADIAN PACIFIC at Portage la Prairie, Man., has been appointed freight tariff inspector, with headquarters as before.

E. B. Kelly and **C. S. Gregory, Jr.,** have been appointed division freight agents of the GULF, MOBILE & OHIO at Mobile and Birmingham, respectively.

ENGINEERING AND SIGNALING

As *Railway Age* reported April 7, **F. H. Simpson** has been appointed chief engineer of NEW YORK CENTRAL Lines West at Chicago, and **F. A. Hess** has been named assistant chief engineer of the same territory.

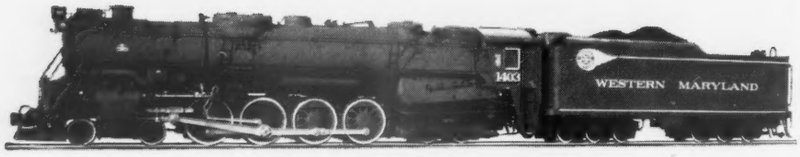
Mr. Simpson was graduated from Rensselaer Polytechnic Institute in 1915 and joined the Central that year as a rodman. After serving with the Army from 1917 to 1919, he rejoined the Central at New York as assistant

F. H. Simpson

resident engineer. In 1937 he was promoted to assistant engineer and in 1939 was made assistant district engineer at Detroit and later at Cleveland. In 1943 he was moved to Chicago as assistant chief engineer. In 1947 he was appointed engineer maintenance of way.

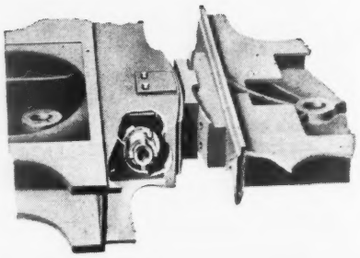
Mr. Hess, a graduate of Armour Institute, held his first railroad position with the Chicago River & Indiana as junior engineer in 1923. He was appointed draftsman in 1929 and assistant engineer in 1933. In 1937 he was promoted to chief draftsman and in 1939 was named assistant engineer in the vice-president's office. He subse-

CUT
locomotive maintenance
COSTS



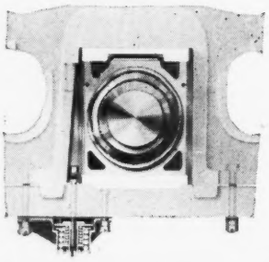
with these
TWO SHOCK ABSORBERS

The Franklin E-2 Radial Buffer



The Franklin E-2 radial buffer reduces maintenance by dampening and absorbing horizontal shake and vertical vibration. This results in less wear on chafing plates, drawbars and pins; fewer pipe failures; less displaced brickwork; and fewer loose cabs. It requires minimum attention and will make any locomotive, at any speed, a better riding engine. Crews appreciate the greater comfort it brings.

The Franklin Compensator and Snubber



—Equally important with roller-bearing or surface-bearing locomotives, the Franklin Compensator and Snubber keeps the driving box or housing snug in the pedestal jaw, regardless of expansion or wear. It will absorb unusual thrusts and shocks. Driving box pound is eliminated. Wear and the possibility of failure of crank pins and rod bearings are minimized. Tire mileage is extended by reduction of quarter slip.

Congratulations to the Western Maryland
ON ITS 100TH ANNIVERSARY

The Western Maryland is one of many prominent users of both the Radial Buffer and the Compensator and Snubber.

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A CORPORATION
NEW YORK • CHICAGO • TULSA • MONTREAL
STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER
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IRVINGTON ELECTRICAL INSULATION AND VARNISH

F. A. Hess

quently became assistant to general manager of the Indiana Harbor Belt and the C.R.& I. (1943) and division engineer of the same roads in 1944. He was named assistant to vice-president of the Central in January 1951.

MECHANICAL

George H. Brown, assistant superintendent of equipment (locomotive) of the DELAWARE & HUDSON at Albany, retired on May 1, after 57 years of service.

H. J. Betts, electrical engineer—equipment of the CANADIAN NATIONAL at Montreal, has been appointed electrical engineer of the Central region at Toronto, succeeding **W. D. Taylor,** deceased (*Railway Age* March 10, page 88).

E. H. Wright has been appointed assistant master mechanic for the Michigan Central district of the NEW YORK CENTRAL at Detroit, Mich., succeeding **G. B. Reid,** assigned to other duties.

F. A. Upton, master mechanic for the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Chicago, has been appointed assistant superintendent of motive power at Milwaukee, Wis. He is succeeded by **R. E. Magnuson,** assistant master mechanic at Chicago.

Mr. Upton started with the railroad in 1939 as a machinist apprentice at Perry, Iowa. Following service in World War II he became roundhouse foreman and general foreman at Milwaukee, and in 1950 was appointed master mechanic at Miles City, Mont. He has been master mechanic at Chicago since April 1951.

OBITUARY

C. D. Mackay, 67, assistant vice-president of the SOUTHERN SYSTEM at Washington, D. C., died on April 29 at Emergency hospital. Mr. Mackay was born at Durham, N. C., on September 22, 1884, and entered the

employ of the Southern as a stenographer in the freight office at Raleigh, N. C., in September 1902, later serving

C. D. Mackay

in various secretarial capacities. In April 1915 he became secretary of subsidiary companies at Atlanta and in 1919 he was promoted to assistant to vice-president at Atlanta, transferring to Washington in April 1920. Mr. Mackay was promoted to assistant vice-president in December 1933.

Allen C. Ater, passenger traffic manager of the GULF, COLORADO & SANTA FE, who died March 27 in Galveston, Tex., began his railroad service with the Atchison, Topeka & Santa Fe as station clerk in 1915. He held positions as telegraph operator and relief agent, ticket clerk, traveling passenger agent,

Allen C. Ater

and division passenger agent. In 1936 he was appointed general passenger agent at Galveston, and in 1946 was named passenger traffic manager of the G. C. & S. F.

Walter S. Johns, retired assistant to chief engineer of the PENNSYLVANIA at Philadelphia, died on April 25 in a Philadelphia hospital.

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